

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: P333386

Luminaire Tested: **S125DIW-S610D1050U835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333386
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-S610D1050U835-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1050 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6691.5 lumens
Efficiency: N/A
Efficacy: 148.0 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

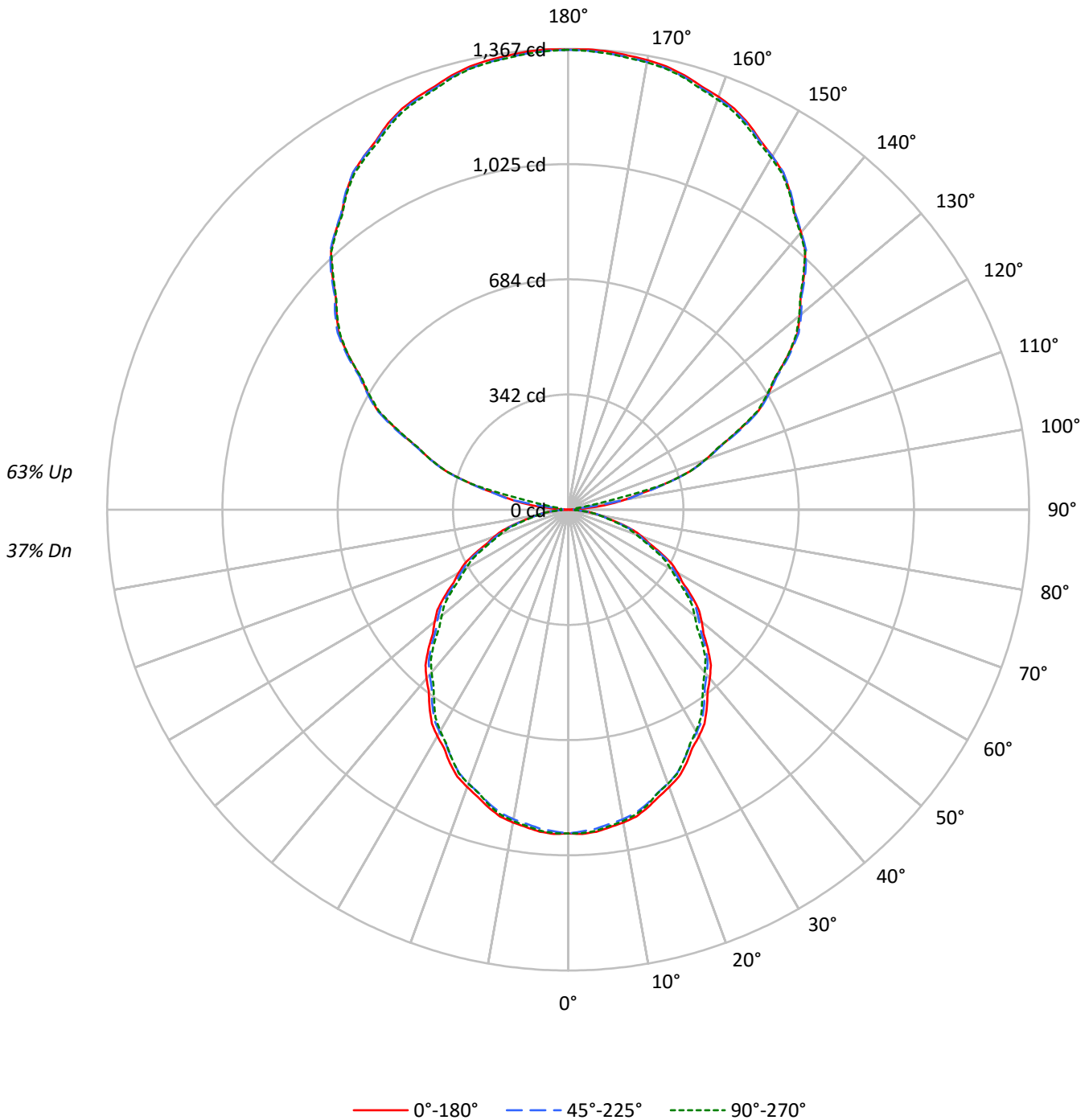
Input Watts (W): 45.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	37
1	95	91	87	83	86	82	79	76	67	64	62	52	51	50	39	38	37	31
2	86	79	73	68	78	72	67	62	58	55	52	46	44	41	35	33	32	26
3	79	69	62	57	71	63	57	52	51	47	43	41	38	35	31	29	27	22
4	72	61	54	48	65	56	49	44	46	41	37	36	33	30	27	25	23	19
5	66	55	47	41	60	50	43	38	41	36	32	32	29	26	25	22	20	17
6	61	49	41	35	55	45	38	33	37	31	28	29	25	23	22	20	18	15
7	56	44	36	31	51	40	33	29	33	28	24	27	23	20	20	18	16	13
8	52	40	32	27	47	37	30	25	30	25	21	24	20	18	19	16	14	11
9	48	36	29	24	44	33	27	22	28	23	19	22	19	16	17	15	13	10
10	45	33	26	21	41	31	24	20	25	21	17	21	17	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6203	6203	6203
5°	6217	6157	6196
10°	6178	6114	6149
15°	6111	6040	6066
20°	6016	5937	5948
25°	5912	5815	5810
30°	5785	5683	5655
35°	5649	5541	5463
40°	5509	5387	5311
45°	5358	5246	5142
50°	5191	5077	4924
55°	5031	4884	4748
60°	4839	4691	4525
65°	4609	4459	4308
70°	4390	4190	4047
75°	4000	3868	3735
80°	3559	3503	3418
85°	3097	3149	2986



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.6	1.4
10°-20°	255.8	3.8
20°-30°	377.7	5.6
30°-40°	440.7	6.6
40°-50°	442.6	6.6
50°-60°	388.5	5.8
60°-70°	289.5	4.3
70°-80°	165.5	2.5
80°-90°	51.0	0.8
90°-100°	49.6	0.7
100°-110°	305.6	4.6
110°-120°	554.2	8.3
120°-130°	711.2	10.6
130°-140°	765.0	11.4
140°-150°	718.0	10.7
150°-160°	580.8	8.7
160°-170°	375.7	5.6
170°-180°	129.6	1.9
0°-30°	724.0	10.8
0°-40°	1164.7	17.4
0°-60°	1995.9	29.8
0°-90°	2501.9	37.4
90°-120°	909.3	13.6
90°-150°	3103.6	46.4
90°-180°	4190.0	62.6
0°-180°	6691.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	960	960	960	960	960	
5°	959	957	950	956	956	91
15°	914	911	903	907	907	257
25°	830	826	816	817	815	382
35°	716	713	703	699	693	448
45°	587	583	574	566	563	452
55°	447	444	434	427	422	399
65°	302	300	292	285	282	299
75°	160	159	155	153	150	171
85°	42	42	42	42	40	47
90°	1	9	16	21	24	5
95°	58	53	16	21	21	73
105°	297	301	301	301	300	315
115°	558	563	564	560	554	553
125°	794	801	801	797	794	709
135°	990	996	994	992	986	763
145°	1148	1150	1150	1151	1145	718
155°	1264	1259	1260	1263	1255	582
165°	1334	1328	1329	1334	1327	377
175°	1364	1359	1359	1366	1358	130
180°	1364	1364	1364	1364	1364	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4
2.5°	962.8	962.4	962.0	961.6	961.2	960.3	959.0	957.6	956.3	954.9	956.3
5°	958.9	958.5	958.2	957.8	957.5	956.5	954.8	953.1	951.4	949.7	951.3
7.5°	950.0	949.7	949.4	949.0	948.7	947.6	945.7	943.9	942.0	940.2	941.6
10°	942.1	941.8	941.5	941.1	940.8	939.7	937.8	936.0	934.1	932.3	933.6
12.5°	932.4	931.8	931.2	930.6	930.0	928.8	927.1	925.4	923.6	921.9	923.0
15°	914.0	913.5	913.0	912.5	912.0	910.8	909.0	907.1	905.2	903.4	904.2
17.5°	892.9	892.2	891.4	890.7	889.9	888.6	886.7	884.7	882.8	880.9	881.9
20°	875.3	874.9	874.6	874.3	873.9	872.7	870.5	868.3	866.1	863.9	865.1
22.5°	857.6	857.0	856.4	855.8	855.2	853.9	851.8	849.8	847.7	845.6	846.4
25°	829.7	828.8	828.0	827.2	826.3	824.8	822.6	820.4	818.2	816.0	816.4
27.5°	797.0	796.5	796.0	795.5	795.0	793.6	791.3	789.1	786.8	784.6	784.6
30°	775.7	775.2	774.7	774.2	773.7	772.2	769.7	767.1	764.6	762.1	761.7
32.5°	752.6	751.9	751.1	750.3	749.5	748.0	745.8	743.5	741.2	739.0	738.4
35°	716.5	715.8	715.1	714.5	713.8	712.3	709.9	707.5	705.2	702.8	702.0
37.5°	678.9	678.1	677.3	676.4	675.6	674.0	671.8	669.6	667.3	665.1	663.9
40°	653.4	652.6	651.7	650.9	650.0	648.4	646.1	643.7	641.3	639.0	637.5
42.5°	626.1	625.4	624.6	623.9	623.2	621.7	619.3	617.0	614.6	612.2	610.9
45°	586.6	585.9	585.2	584.5	583.9	582.5	580.5	578.5	576.4	574.4	572.4
47.5°	544.0	544.0	544.1	544.1	544.1	542.9	540.5	538.1	535.7	533.2	531.2
50°	516.7	516.1	515.6	515.1	514.6	513.4	511.3	509.3	507.3	505.3	503.1
52.5°	488.7	488.3	488.0	487.6	487.2	485.9	483.8	481.6	479.5	477.3	475.4
55°	446.8	446.2	445.7	445.2	444.7	443.3	440.9	438.6	436.2	433.8	432.3
57.5°	402.5	402.3	402.0	401.7	401.5	400.3	398.3	396.3	394.3	392.4	390.4
60°	374.6	373.9	373.2	372.5	371.9	370.6	368.8	366.9	365.0	363.2	361.5
62.5°	345.4	344.9	344.3	343.8	343.2	342.2	340.6	339.0	337.4	335.8	334.0
65°	301.6	301.3	301.0	300.6	300.3	299.2	297.3	295.5	293.6	291.8	290.2
67.5°	259.2	258.5	257.8	257.1	256.4	255.4	254.0	252.6	251.2	249.8	248.5
70°	232.5	231.7	230.8	230.0	229.1	227.9	226.4	224.9	223.4	221.9	220.8
72.5°	203.3	202.7	202.2	201.6	201.0	200.2	199.3	198.3	197.3	196.3	195.2
75°	160.3	160.0	159.6	159.3	159.0	158.4	157.5	156.7	155.8	155.0	154.5
77.5°	120.7	120.5	120.4	120.2	120.1	119.8	119.3	118.9	118.4	117.9	117.6
80°	95.7	95.7	95.7	95.7	95.7	95.6	95.2	94.9	94.6	94.2	94.0
82.5°	73.9	73.6	73.3	73.0	72.8	72.6	72.5	72.5	72.4	72.3	72.0
85°	41.8	42.0	42.1	42.3	42.5	42.5	42.5	42.5	42.5	42.5	42.4
87.5°	16.6	17.0	17.3	17.7	18.1	18.3	18.5	18.7	18.9	19.0	19.3
90°	1.0	2.8	4.6	6.4	8.2	9.9	11.5	13.0	14.6	16.2	17.3
92.5°	15.6	14.3	13.1	11.8	10.5	10.6	12.0	13.4	14.8	16.2	17.3
95°	57.6	57.0	56.3	55.6	55.0	50.3	41.8	33.3	24.7	16.2	17.3
97.5°	120.4	121.6	122.8	124.0	125.2	117.4	100.5	83.6	66.7	49.8	43.4
100°	168.9	169.6	170.2	170.9	171.6	172.4	173.3	174.2	175.1	176.0	142.5
102.5°	218.3	219.1	220.0	220.8	221.7	222.4	222.9	223.4	224.0	224.5	218.2
105°	297.3	298.2	299.1	300.0	300.9	301.4	301.4	301.4	301.4	301.4	301.4
107.5°	379.5	379.5	379.5	379.5	379.5	379.7	380.1	380.6	381.0	381.5	381.5
110°	432.9	432.9	432.9	432.9	432.9	433.1	433.5	434.0	434.4	434.9	434.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	483.0	483.6	484.1	484.6	485.2	485.6	485.9	486.1	486.4	486.7	485.8
115°	558.3	559.4	560.5	561.6	562.8	563.4	563.7	563.9	564.1	564.3	563.4
117.5°	636.2	636.1	636.1	636.0	636.0	636.4	637.2	638.1	638.9	639.8	638.6
120°	684.7	684.5	684.2	684.0	683.8	684.0	684.7	685.4	686.0	686.7	686.3
122.5°	727.6	728.4	729.3	730.1	731.0	731.6	731.9	732.2	732.5	732.8	732.4
125°	793.9	795.5	797.1	798.6	800.2	801.0	801.0	801.0	801.0	801.0	800.1
127.5°	857.2	858.4	859.5	860.6	861.7	862.2	862.1	862.0	861.8	861.7	861.2
130°	896.1	897.2	898.3	899.4	900.6	901.2	901.5	901.7	901.9	902.1	901.5
132.5°	934.9	936.2	937.5	938.8	940.1	940.5	940.0	939.5	939.0	938.6	938.4
135°	990.1	991.5	992.8	994.2	995.5	996.0	995.5	995.1	994.6	994.2	993.7
137.5°	1040.9	1042.1	1043.2	1044.4	1045.6	1046.0	1045.6	1045.2	1044.7	1044.3	1044.4
140°	1074.1	1074.5	1075.0	1075.4	1075.9	1076.0	1075.8	1075.5	1075.3	1075.1	1075.5
142.5°	1104.0	1104.3	1104.6	1104.8	1105.1	1105.4	1105.7	1106.0	1106.3	1106.6	1106.7
145°	1147.9	1148.4	1148.8	1149.3	1149.7	1149.9	1149.9	1149.9	1149.9	1149.9	1150.2
147.5°	1186.3	1186.3	1186.2	1186.1	1186.0	1186.1	1186.3	1186.6	1186.9	1187.1	1187.4
150°	1210.6	1210.2	1209.7	1209.3	1208.8	1208.8	1209.3	1209.7	1210.2	1210.6	1211.1
152.5°	1234.1	1233.1	1232.1	1231.1	1230.1	1229.9	1230.3	1230.8	1231.2	1231.6	1232.1
155°	1264.2	1262.9	1261.5	1260.2	1258.8	1258.4	1258.8	1259.3	1259.7	1260.2	1260.8
157.5°	1287.5	1286.7	1285.9	1285.1	1284.2	1283.9	1283.9	1283.9	1284.0	1284.0	1284.8
160°	1303.7	1302.3	1301.0	1299.6	1298.3	1297.7	1297.9	1298.2	1298.4	1298.6	1299.5
162.5°	1316.6	1315.3	1313.9	1312.6	1311.2	1310.6	1310.9	1311.1	1311.3	1311.5	1312.8
165°	1334.0	1332.7	1331.3	1330.0	1328.6	1328.0	1328.3	1328.5	1328.7	1328.9	1330.3
167.5°	1346.9	1345.6	1344.2	1342.8	1341.4	1340.8	1341.0	1341.2	1341.5	1341.7	1343.3
170°	1354.2	1352.7	1351.1	1349.5	1347.9	1347.3	1347.5	1347.7	1347.9	1348.2	1350.0
172.5°	1359.1	1357.5	1355.9	1354.4	1352.8	1352.2	1352.6	1353.0	1353.4	1353.8	1355.4
175°	1364.3	1363.0	1361.6	1360.3	1358.9	1358.4	1358.6	1358.8	1359.1	1359.3	1361.1
177.5°	1366.8	1365.7	1364.6	1363.5	1362.5	1362.0	1362.2	1362.4	1362.5	1362.7	1364.0
180°	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4
2.5°	957.6	959.0	960.3	960.9	960.8	960.6	960.5	960.4
5°	952.8	954.3	955.8	956.5	956.3	956.2	956.0	955.8
7.5°	943.1	944.6	946.1	946.8	946.6	946.4	946.3	946.1
10°	935.0	936.3	937.7	938.3	938.1	937.9	937.7	937.6
12.5°	924.1	925.2	926.2	926.8	926.7	926.7	926.7	926.6
15°	905.1	905.9	906.8	907.2	907.2	907.2	907.2	907.2
17.5°	883.0	884.0	885.1	885.2	884.3	883.5	882.7	881.8
20°	866.2	867.4	868.6	868.8	867.9	867.1	866.2	865.4
22.5°	847.2	848.0	848.8	848.9	848.3	847.7	847.1	846.6
25°	816.7	817.0	817.4	817.3	816.8	816.3	815.8	815.3
27.5°	784.7	784.8	784.8	784.6	784.1	783.6	783.1	782.6
30°	761.4	761.1	760.7	760.3	759.8	759.3	758.8	758.3
32.5°	737.8	737.1	736.5	735.8	734.9	734.0	733.0	732.1
35°	701.1	700.3	699.4	698.3	697.0	695.6	694.3	692.9
37.5°	662.6	661.4	660.1	659.1	658.3	657.6	656.8	656.0
40°	635.9	634.4	632.9	631.9	631.4	630.9	630.4	629.9
42.5°	609.5	608.1	606.7	605.6	604.8	604.1	603.3	602.5
45°	570.3	568.3	566.3	565.0	564.5	564.0	563.5	563.0
47.5°	529.1	527.0	525.0	523.4	522.2	521.0	519.8	518.6
50°	500.9	498.7	496.5	494.8	493.6	492.4	491.2	490.1
52.5°	473.4	471.5	469.6	468.0	466.7	465.3	464.0	462.7
55°	430.8	429.3	427.8	426.4	425.2	424.0	422.9	421.7
57.5°	388.4	386.5	384.5	383.2	382.6	381.9	381.3	380.7
60°	359.8	358.1	356.4	355.0	353.8	352.6	351.4	350.3
62.5°	332.2	330.4	328.5	327.2	326.3	325.3	324.4	323.5
65°	288.7	287.2	285.7	284.6	283.9	283.2	282.6	281.9
67.5°	247.3	246.0	244.7	243.8	243.4	243.0	242.6	242.2
70°	219.8	218.8	217.8	217.0	216.3	215.6	214.9	214.3
72.5°	194.0	192.9	191.7	190.8	190.1	189.5	188.8	188.1
75°	154.0	153.5	153.0	152.4	151.7	151.0	150.4	149.7
77.5°	117.3	117.0	116.7	116.3	115.8	115.4	114.9	114.4
80°	93.9	93.7	93.5	93.3	92.9	92.6	92.3	91.9
82.5°	71.7	71.4	71.1	70.9	70.9	70.8	70.7	70.7
85°	42.2	42.0	41.9	41.6	41.3	40.9	40.6	40.3
87.5°	19.5	19.7	19.9	20.0	19.8	19.7	19.6	19.4
90°	18.4	19.6	20.7	21.6	22.3	22.9	23.6	24.3
92.5°	18.4	19.6	20.7	21.4	21.7	22.0	22.3	22.7
95°	18.4	19.6	20.7	21.2	21.2	21.2	21.2	21.2
97.5°	37.1	30.7	24.4	21.2	21.2	21.2	21.2	21.2
100°	109.0	75.5	42.0	24.8	23.9	23.0	22.1	21.2
102.5°	211.8	205.5	199.2	188.4	173.1	157.8	142.5	127.2
105°	301.4	301.4	301.4	301.3	301.1	300.8	300.6	300.4
107.5°	381.6	381.6	381.7	381.4	380.7	380.0	379.3	378.7
110°	433.5	432.9	432.2	432.0	432.2	432.4	432.6	432.9



TEST NUMBER: P333386

CATALOG NUMBER: S125DIW-S610D1050U835-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	485.0	484.1	483.3	482.7	482.4	482.0	481.7	481.4
115°	562.5	561.6	560.7	559.6	558.3	556.9	555.6	554.2
117.5°	637.5	636.3	635.1	634.2	633.7	633.1	632.5	631.9
120°	685.8	685.4	684.9	684.1	683.0	681.9	680.8	679.6
122.5°	731.9	731.5	731.0	730.2	728.9	727.6	726.3	725.0
125°	799.2	798.3	797.4	796.6	796.0	795.3	794.6	793.9
127.5°	860.7	860.2	859.7	858.6	857.0	855.3	853.6	852.0
130°	900.8	900.1	899.4	898.5	897.4	896.3	895.2	894.1
132.5°	938.3	938.1	938.0	937.4	936.3	935.1	934.0	932.9
135°	993.3	992.8	992.4	991.5	990.1	988.8	987.4	986.1
137.5°	1044.5	1044.6	1044.7	1044.2	1043.0	1041.8	1040.7	1039.5
140°	1076.0	1076.4	1076.9	1076.4	1075.1	1073.7	1072.4	1071.0
142.5°	1106.8	1106.9	1107.0	1106.4	1105.0	1103.7	1102.3	1101.0
145°	1150.4	1150.6	1150.8	1150.3	1148.9	1147.6	1146.2	1144.9
147.5°	1187.7	1188.0	1188.2	1187.6	1185.9	1184.3	1182.7	1181.1
150°	1211.5	1212.0	1212.4	1211.7	1209.9	1208.1	1206.3	1204.5
152.5°	1232.5	1233.0	1233.4	1232.9	1231.2	1229.6	1228.0	1226.4
155°	1261.5	1262.2	1262.9	1262.3	1260.5	1258.7	1256.9	1255.1
157.5°	1285.5	1286.2	1286.9	1286.4	1284.6	1282.8	1281.0	1279.2
160°	1300.4	1301.3	1302.2	1301.7	1300.0	1298.2	1296.4	1294.6
162.5°	1314.1	1315.3	1316.6	1316.2	1314.2	1312.3	1310.3	1308.3
165°	1331.6	1333.0	1334.3	1334.1	1332.3	1330.5	1328.7	1326.9
167.5°	1344.9	1346.5	1348.2	1348.0	1345.9	1343.9	1341.9	1339.9
170°	1351.8	1353.6	1355.4	1355.2	1353.2	1351.2	1349.2	1347.1
172.5°	1357.1	1358.7	1360.3	1360.1	1358.1	1356.0	1354.0	1352.0
175°	1362.9	1364.7	1366.5	1366.4	1364.3	1362.3	1360.3	1358.3
177.5°	1365.2	1366.5	1367.8	1367.7	1366.2	1364.8	1363.4	1361.9
180°	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3	1364.3

(END OF REPORT)