

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: P333387

Luminaire Tested: **S125DIW-S610D1050U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333387
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-S610D1050U835-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1050 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6135.1 lumens
Efficiency: N/A
Efficacy: 135.7 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: General Diffuse

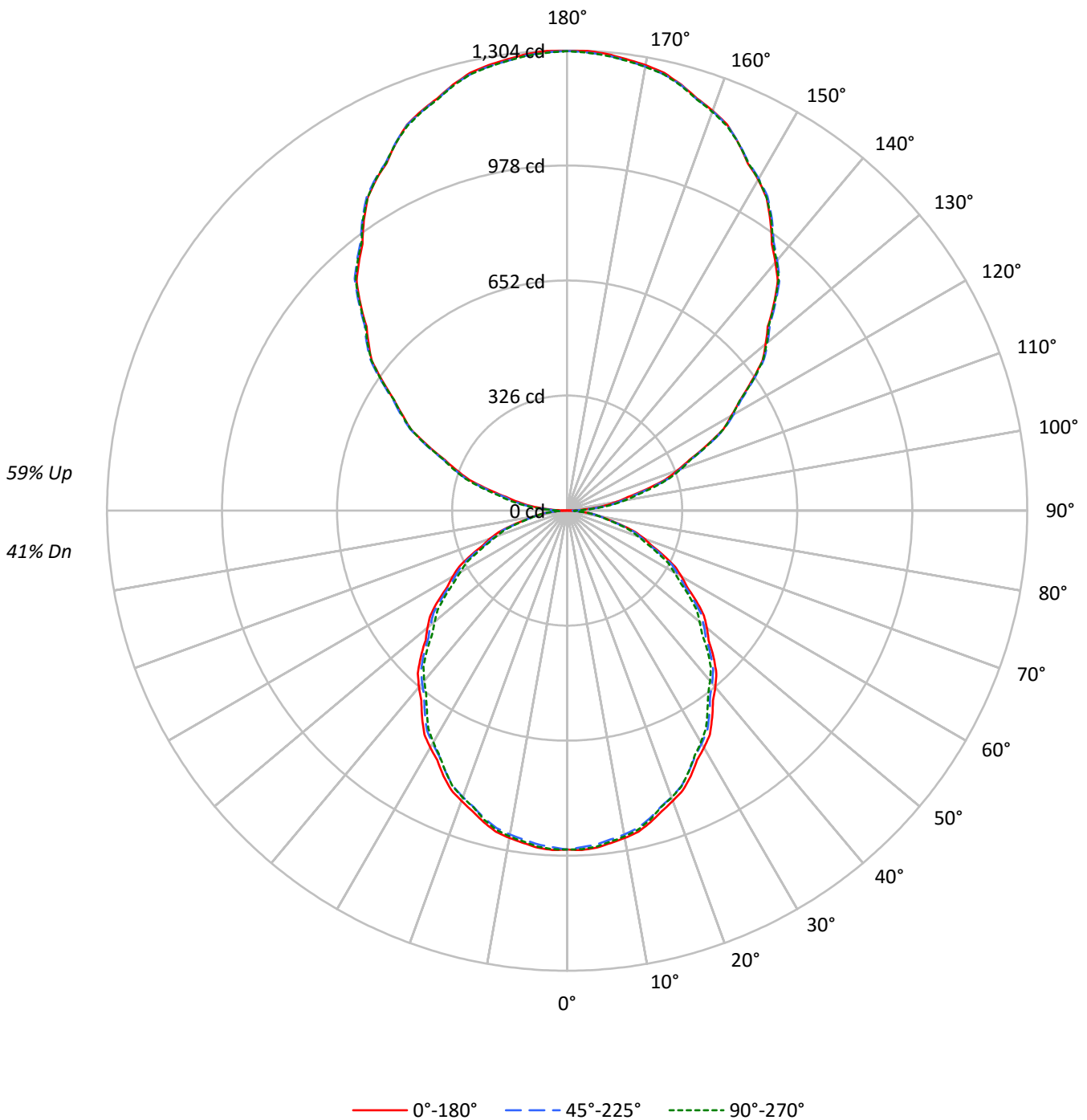
Input Watts (W): 45.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	96	96	96	96	78	78	78	62	62	62	48	48	48	41
1	96	91	88	84	87	83	80	77	68	66	64	55	53	52	42	41	40	34
2	87	80	74	69	79	73	68	63	60	56	53	48	45	43	37	35	34	29
3	79	70	63	57	72	64	58	53	53	48	44	42	39	36	33	31	29	24
4	73	62	54	48	66	57	50	45	47	42	38	38	34	31	29	27	25	21
5	67	55	47	41	60	51	43	38	42	37	33	34	30	27	26	24	21	18
6	61	49	41	36	56	45	38	33	38	32	28	31	27	24	24	21	19	16
7	57	44	37	31	51	41	34	29	34	29	25	28	24	21	22	19	17	14
8	52	40	33	27	48	37	30	26	31	26	22	25	21	18	20	17	15	13
9	49	37	29	24	44	34	27	23	28	23	20	23	19	17	18	16	14	11
10	46	34	27	22	42	31	25	20	26	21	18	21	18	15	17	14	12	10

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	1.5
10°-20°	255.8	4.2
20°-30°	377.7	6.2
30°-40°	440.7	7.2
40°-50°	442.6	7.2
50°-60°	388.5	6.3
60°-70°	289.5	4.7
70°-80°	165.5	2.7
80°-90°	51.0	0.8
90°-100°	87.2	1.4
100°-110°	257.5	4.2
110°-120°	436.2	7.1
120°-130°	574.0	9.4
130°-140°	643.2	10.5
140°-150°	630.4	10.3
150°-160°	529.5	8.6
160°-170°	352.0	5.7
170°-180°	123.2	2.0
0°-30°	724.0	11.8
0°-40°	1164.7	19.0
0°-60°	1995.9	32.5
0°-90°	2501.9	40.8
90°-120°	780.9	12.7
90°-150°	2628.6	42.8
90°-180°	3633.0	59.2
0°-180°	6135.1	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	6
95°	66	68	78	85	87	70
105°	231	236	242	248	251	247
115°	437	441	443	442	441	432
125°	637	643	644	642	641	571
135°	829	835	836	836	832	639
145°	1004	1008	1011	1011	1008	627
155°	1149	1149	1150	1154	1149	529
165°	1249	1247	1248	1252	1246	352
175°	1299	1295	1295	1300	1294	123
180°	1302	1302	1302	1302	1302	



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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	13.1	14.6	16.2	17.3
92.5°	24.5	25.8	27.0	28.3	29.6	31.2	33.1	35.0	37.0	38.9	40.4
95°	65.9	66.3	66.8	67.2	67.7	69.0	71.3	73.5	75.8	78.0	79.6
97.5°	109.4	109.6	109.8	110.0	110.2	111.8	114.9	118.0	121.1	124.2	125.7
100°	141.9	141.9	141.9	141.9	141.9	143.3	146.2	149.2	152.1	155.0	157.1
102.5°	176.7	177.6	178.5	179.4	180.3	181.5	183.0	184.5	186.0	187.5	189.7
105°	231.0	232.1	233.3	234.4	235.5	236.8	238.1	239.5	240.8	242.2	243.5
107.5°	291.0	292.1	293.3	294.4	295.5	296.6	297.6	298.7	299.7	300.7	301.4
110°	332.3	333.5	334.6	335.7	336.9	337.8	338.4	339.1	339.8	340.5	341.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	374.5	375.1	375.7	376.3	376.8	377.6	378.4	379.3	380.1	381.0	381.3
115°	436.7	437.6	438.5	439.4	440.3	441.0	441.4	441.9	442.3	442.8	442.6
117.5°	499.1	499.5	499.9	500.3	500.8	501.2	501.6	502.0	502.4	502.8	503.0
120°	538.0	539.2	540.3	541.4	542.5	543.2	543.4	543.7	543.9	544.1	544.1
122.5°	580.2	580.6	581.0	581.4	581.8	582.3	582.9	583.5	584.1	584.7	584.5
125°	637.3	638.7	640.0	641.4	642.7	643.5	643.8	644.0	644.2	644.4	644.0
127.5°	698.1	698.9	699.7	700.4	701.2	701.7	702.0	702.3	702.5	702.8	702.6
130°	734.6	735.7	736.9	738.0	739.1	739.9	740.4	740.8	741.3	741.7	741.5
132.5°	771.1	772.9	774.8	776.6	778.5	779.4	779.3	779.2	779.1	779.0	778.8
135°	828.8	830.2	831.5	832.9	834.3	835.0	835.3	835.5	835.7	835.9	835.9
137.5°	883.2	884.5	885.8	887.1	888.4	889.3	889.8	890.3	890.8	891.3	891.5
140°	918.0	919.1	920.3	921.4	922.5	923.4	924.1	924.8	925.4	926.1	926.6
142.5°	952.9	953.8	954.8	955.7	956.7	957.6	958.4	959.3	960.1	961.0	961.2
145°	1004.1	1005.0	1005.9	1006.8	1007.7	1008.5	1009.2	1009.9	1010.6	1011.2	1011.2
147.5°	1051.6	1052.1	1052.6	1053.0	1053.5	1054.1	1054.6	1055.1	1055.7	1056.2	1056.8
150°	1083.2	1083.0	1082.7	1082.5	1082.3	1082.6	1083.5	1084.4	1085.3	1086.2	1086.2
152.5°	1109.1	1109.4	1109.7	1110.1	1110.4	1110.7	1111.1	1111.4	1111.8	1112.2	1112.7
155°	1149.0	1149.0	1149.0	1149.0	1149.0	1149.1	1149.4	1149.6	1149.8	1150.1	1151.0
157.5°	1184.7	1184.2	1183.7	1183.2	1182.7	1182.6	1182.8	1183.0	1183.3	1183.5	1184.4
160°	1205.8	1205.1	1204.4	1203.8	1203.1	1202.9	1203.1	1203.3	1203.5	1203.8	1204.7
162.5°	1224.4	1223.9	1223.4	1222.9	1222.4	1222.2	1222.3	1222.3	1222.4	1222.4	1223.5
165°	1249.4	1248.9	1248.4	1248.0	1247.5	1247.4	1247.7	1247.9	1248.1	1248.3	1249.2
167.5°	1270.4	1269.5	1268.6	1267.7	1266.8	1266.4	1266.4	1266.4	1266.4	1266.4	1267.7
170°	1281.8	1280.9	1280.0	1279.1	1278.2	1277.7	1277.7	1277.7	1277.7	1277.7	1279.1
172.5°	1289.9	1289.0	1288.1	1287.2	1286.3	1285.8	1285.8	1285.8	1285.8	1285.8	1287.2
175°	1299.0	1298.1	1297.2	1296.3	1295.4	1294.9	1294.9	1294.9	1294.9	1294.9	1296.3
177.5°	1303.7	1302.9	1302.2	1301.5	1300.8	1300.3	1300.1	1300.0	1299.8	1299.6	1300.7
180°	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0



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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	19.9	19.7	19.6	19.5
90°	18.5	19.6	20.7	21.6	22.3	23.0	23.6	24.3
92.5°	41.9	43.4	44.9	45.8	46.3	46.8	47.3	47.8
95°	81.2	82.7	84.3	85.3	85.8	86.2	86.7	87.1
97.5°	127.2	128.7	130.2	131.0	131.3	131.6	131.9	132.1
100°	159.1	161.1	163.1	164.4	164.8	165.3	165.7	166.2
102.5°	191.9	194.1	196.3	197.7	198.3	199.0	199.6	200.2
105°	244.9	246.2	247.6	248.6	249.3	249.9	250.6	251.3
107.5°	302.1	302.8	303.4	303.8	303.7	303.7	303.6	303.6
110°	341.8	342.5	343.2	343.4	343.2	342.9	342.7	342.5



TEST NUMBER: P333387

CATALOG NUMBER: S125DIW-S610D1050U835-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	381.6	381.9	382.2	382.2	381.8	381.4	381.0	380.6
115°	442.3	442.1	441.9	441.7	441.4	441.2	441.0	440.8
117.5°	503.1	503.3	503.5	503.1	502.2	501.3	500.4	499.5
120°	544.1	544.1	544.1	543.7	542.8	541.9	541.0	540.1
122.5°	584.3	584.1	583.9	583.5	582.8	582.0	581.3	580.6
125°	643.5	643.1	642.6	642.3	642.1	641.8	641.6	641.4
127.5°	702.3	702.1	701.9	701.6	701.1	700.7	700.2	699.8
130°	741.3	741.0	740.8	740.5	740.0	739.6	739.1	738.7
132.5°	778.5	778.3	778.1	777.7	777.0	776.4	775.8	775.1
135°	835.9	835.9	835.9	835.5	834.6	833.7	832.8	831.9
137.5°	891.8	892.1	892.3	891.9	890.8	889.7	888.5	887.4
140°	927.0	927.5	927.9	927.6	926.5	925.3	924.2	923.1
142.5°	961.5	961.8	962.1	961.6	960.5	959.4	958.3	957.1
145°	1011.2	1011.2	1011.2	1010.9	1010.2	1009.5	1008.9	1008.2
147.5°	1057.3	1057.8	1058.4	1057.9	1056.4	1054.8	1053.3	1051.8
150°	1086.2	1086.2	1086.2	1086.0	1085.5	1085.1	1084.6	1084.2
152.5°	1113.2	1113.8	1114.3	1114.2	1113.4	1112.6	1111.7	1110.9
155°	1151.9	1152.8	1153.7	1153.5	1152.4	1151.3	1150.2	1149.0
157.5°	1185.3	1186.2	1187.1	1186.8	1185.3	1183.8	1182.3	1180.9
160°	1205.6	1206.5	1207.4	1207.2	1206.1	1205.0	1203.9	1202.7
162.5°	1224.6	1225.6	1226.7	1226.6	1225.3	1224.0	1222.7	1221.4
165°	1250.1	1251.0	1251.9	1251.7	1250.4	1249.0	1247.7	1246.3
167.5°	1269.1	1270.4	1271.8	1271.8	1270.4	1269.0	1267.6	1266.2
170°	1280.4	1281.8	1283.1	1283.0	1281.4	1279.9	1278.3	1276.7
172.5°	1288.5	1289.9	1291.2	1291.2	1289.8	1288.4	1287.0	1285.6
175°	1297.6	1299.0	1300.4	1300.2	1298.7	1297.1	1295.5	1293.9
177.5°	1301.8	1302.9	1303.9	1303.8	1302.6	1301.3	1300.1	1298.8
180°	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0	1302.0

(END OF REPORT)