

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: P333184

Luminaire Tested: **S125DIP-S610D810U835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333184
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: S125DIP-S610D810U835-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5740.9 lumens
Efficiency: N/A
Efficacy: 149.5 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

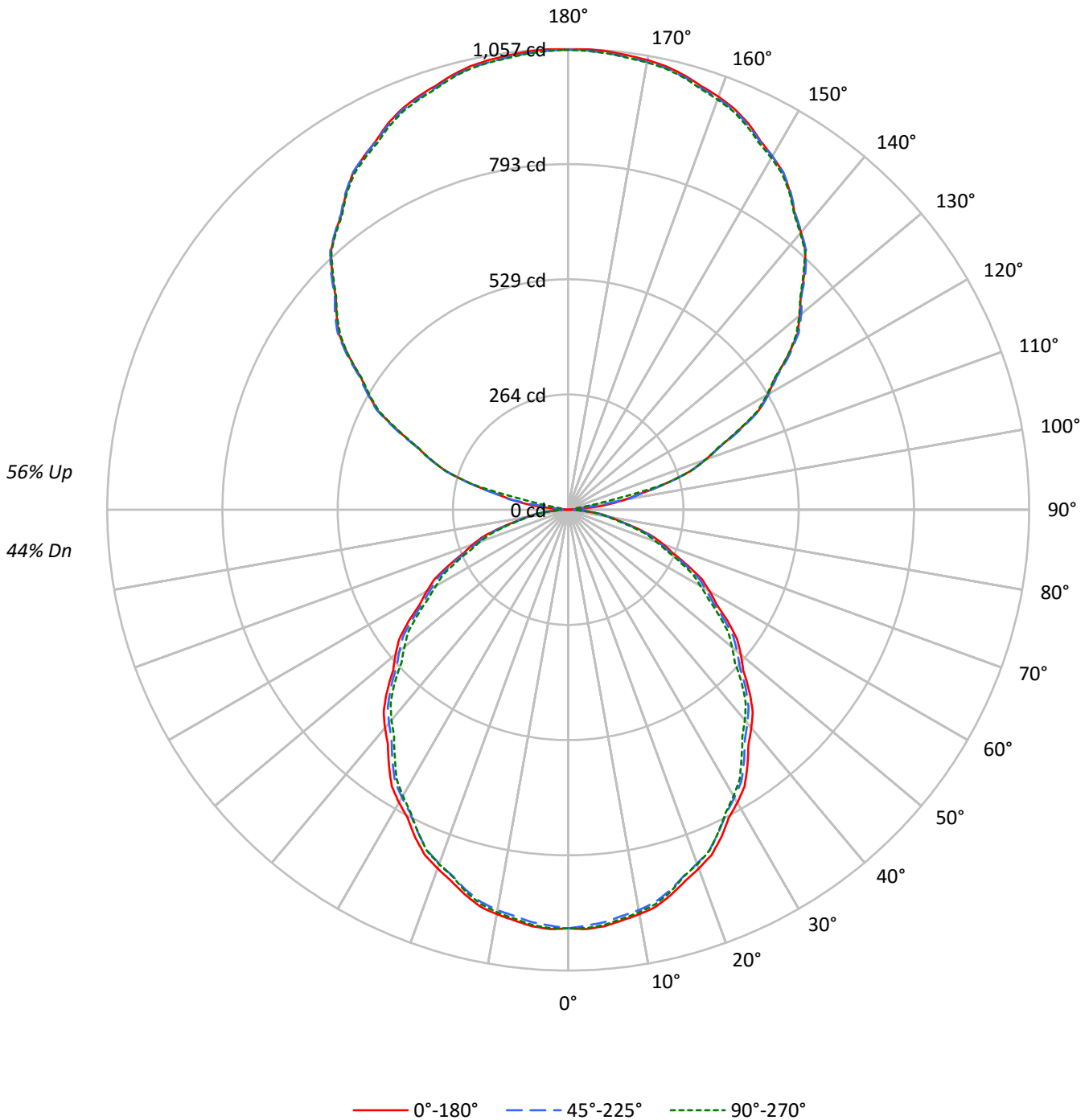
Input Watts (W): 38.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333184

CATALOG NUMBER: S125DIP-S610D810U835-4F0-1E-UDD-F

Luminous Intensity Polar Plot





TEST NUMBER: P333184

CATALOG NUMBER: S125DIP-S610D810U835-4F0-1E-UDD-F

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	106	106	106	106	97	97	97	97	80	80	80	64	64	64	50	50	50	44
1	96	92	88	85	88	84	81	78	70	67	65	57	55	53	44	43	42	37
2	88	80	74	69	80	74	68	64	61	57	54	50	47	45	39	37	36	31
3	80	71	63	57	73	65	58	53	54	49	45	44	40	38	34	32	30	26
4	73	62	55	49	67	57	50	45	48	43	39	39	35	32	31	28	26	22
5	67	55	47	41	61	51	44	39	43	37	33	35	31	28	28	25	23	19
6	62	50	42	36	56	46	39	34	38	33	29	32	27	24	25	22	20	17
7	57	45	37	31	52	41	34	29	35	29	25	29	25	22	23	20	18	15
8	53	41	33	28	48	38	31	26	32	26	23	26	22	19	21	18	16	13
9	49	37	30	25	45	34	28	23	29	24	20	24	20	17	19	16	14	12
10	46	34	27	22	42	31	25	21	27	22	18	22	18	16	18	15	13	11

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



TEST NUMBER: P333184

CATALOG NUMBER: S125DIP-S610D810U835-4F0-1E-UDD-F

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.6	1.6
10°-20°	255.8	4.5
20°-30°	377.7	6.6
30°-40°	440.7	7.7
40°-50°	442.6	7.7
50°-60°	388.5	6.8
60°-70°	289.5	5.0
70°-80°	165.5	2.9
80°-90°	50.3	0.9
90°-100°	38.3	0.7
100°-110°	236.3	4.1
110°-120°	428.5	7.5
120°-130°	550.0	9.6
130°-140°	591.5	10.3
140°-150°	555.2	9.7
150°-160°	449.1	7.8
160°-170°	290.5	5.1
170°-180°	100.2	1.7
0°-30°	724.0	12.6
0°-40°	1164.7	20.3
0°-60°	1995.9	34.8
0°-90°	2501.2	43.6
90°-120°	703.1	12.2
90°-150°	2399.9	41.8
90°-180°	3240.0	56.4
0°-180°	5740.9	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	7	12	16	19	4
95°	45	41	12	16	16	57
105°	230	233	233	233	232	244
115°	432	435	436	433	429	428
125°	614	619	619	616	614	548
135°	766	770	769	767	762	590
145°	888	889	889	890	885	555
155°	978	973	974	976	970	450
165°	1032	1027	1028	1032	1026	291
175°	1055	1051	1051	1057	1050	100
180°	1055	1055	1055	1055	1055	



TEST NUMBER: P333184

CATALOG NUMBER: S125DIP-S610D810U835-4F0-1E-UDD-F

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	16.8	17.1	17.4	17.7	17.9	18.0	18.1	18.2	18.3	18.5
90°	0.8	2.2	3.6	5.0	6.3	7.6	8.9	10.1	11.3	12.5	13.4
92.5°	12.0	11.1	10.1	9.1	8.2	8.2	9.3	10.4	11.4	12.5	13.4
95°	44.6	44.1	43.5	43.0	42.5	38.9	32.3	25.7	19.1	12.5	13.4
97.5°	93.1	94.0	94.9	95.9	96.8	90.8	77.7	64.6	51.5	38.5	33.6
100°	130.6	131.1	131.6	132.2	132.7	133.3	134.0	134.7	135.4	136.1	110.2
102.5°	168.8	169.4	170.1	170.7	171.4	171.9	172.4	172.8	173.2	173.6	168.7
105°	229.9	230.6	231.3	232.0	232.7	233.0	233.0	233.0	233.0	233.0	233.0
107.5°	293.4	293.4	293.4	293.4	293.4	293.6	293.9	294.3	294.6	295.0	295.0
110°	334.7	334.7	334.7	334.7	334.7	334.9	335.2	335.6	335.9	336.3	335.8



TEST NUMBER: P333184

CATALOG NUMBER: S125DIP-S610D810U835-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	373.5	373.9	374.3	374.8	375.2	375.5	375.7	375.9	376.1	376.3	375.7
115°	431.7	432.6	433.4	434.3	435.2	435.7	435.9	436.0	436.2	436.4	435.7
117.5°	491.9	491.9	491.8	491.8	491.8	492.1	492.7	493.4	494.1	494.7	493.8
120°	529.4	529.3	529.1	528.9	528.7	528.9	529.4	530.0	530.5	531.0	530.7
122.5°	562.6	563.3	563.9	564.6	565.2	565.7	565.9	566.2	566.4	566.7	566.3
125°	613.9	615.1	616.3	617.6	618.8	619.4	619.4	619.4	619.4	619.4	618.7
127.5°	662.9	663.7	664.6	665.5	666.3	666.7	666.6	666.5	666.4	666.3	665.9
130°	692.9	693.8	694.6	695.5	696.4	696.9	697.1	697.2	697.4	697.6	697.1
132.5°	722.9	723.9	724.9	725.9	727.0	727.3	726.9	726.5	726.1	725.7	725.6
135°	765.6	766.7	767.7	768.8	769.8	770.1	769.8	769.4	769.1	768.8	768.4
137.5°	804.9	805.8	806.7	807.6	808.5	808.8	808.5	808.2	807.9	807.5	807.6
140°	830.5	830.9	831.2	831.6	831.9	832.0	831.8	831.7	831.5	831.3	831.7
142.5°	853.7	853.9	854.1	854.3	854.5	854.7	855.0	855.2	855.5	855.7	855.8
145°	887.6	888.0	888.3	888.7	889.0	889.2	889.2	889.2	889.2	889.2	889.4
147.5°	917.3	917.3	917.2	917.1	917.1	917.1	917.3	917.5	917.8	918.0	918.2
150°	936.1	935.8	935.4	935.1	934.7	934.7	935.1	935.4	935.8	936.1	936.5
152.5°	954.3	953.5	952.7	952.0	951.2	951.0	951.3	951.7	952.0	952.4	952.7
155°	977.6	976.5	975.5	974.4	973.4	973.0	973.4	973.7	974.1	974.4	974.9
157.5°	995.5	994.9	994.3	993.7	993.0	992.7	992.8	992.8	992.8	992.9	993.4
160°	1008.1	1007.0	1006.0	1004.9	1003.9	1003.5	1003.6	1003.8	1004.0	1004.1	1004.8
162.5°	1018.1	1017.0	1016.0	1014.9	1013.9	1013.5	1013.6	1013.8	1014.0	1014.2	1015.1
165°	1031.5	1030.5	1029.4	1028.4	1027.3	1026.9	1027.1	1027.3	1027.4	1027.6	1028.7
167.5°	1041.5	1040.5	1039.4	1038.3	1037.2	1036.8	1036.9	1037.1	1037.3	1037.5	1038.7
170°	1047.2	1045.9	1044.7	1043.5	1042.3	1041.8	1041.9	1042.1	1042.3	1042.5	1043.9
172.5°	1050.9	1049.7	1048.5	1047.3	1046.0	1045.6	1045.9	1046.2	1046.5	1046.8	1048.1
175°	1055.0	1053.9	1052.9	1051.9	1050.8	1050.4	1050.5	1050.7	1050.9	1051.1	1052.5
177.5°	1056.9	1056.0	1055.2	1054.4	1053.5	1053.2	1053.3	1053.4	1053.6	1053.7	1054.7
180°	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0



TEST NUMBER: P333184

CATALOG NUMBER: S125DIP-S610D810U835-4F0-1E-UDD-F

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°	18.7	18.8	19.0	19.0	18.8	18.7	18.5	18.3
90°	14.3	15.1	16.0	16.7	17.2	17.7	18.2	18.8
92.5°	14.3	15.1	16.0	16.5	16.8	17.0	17.3	17.5
95°	14.3	15.1	16.0	16.4	16.4	16.4	16.4	16.4
97.5°	28.7	23.8	18.9	16.4	16.4	16.4	16.4	16.4
100°	84.3	58.4	32.5	19.2	18.5	17.8	17.1	16.4
102.5°	163.8	158.9	154.0	145.7	133.8	122.0	110.2	98.4
105°	233.0	233.0	233.0	233.0	232.8	232.6	232.4	232.3
107.5°	295.1	295.1	295.1	294.9	294.4	293.8	293.3	292.8
110°	335.2	334.7	334.2	334.0	334.2	334.4	334.5	334.7



TEST NUMBER: P333184

CATALOG NUMBER: S125DIP-S610D810U835-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	375.0	374.3	373.7	373.2	373.0	372.7	372.5	372.3
115°	435.0	434.3	433.6	432.7	431.7	430.6	429.6	428.6
117.5°	492.9	492.0	491.1	490.4	490.0	489.5	489.1	488.6
120°	530.3	530.0	529.6	529.0	528.1	527.3	526.4	525.5
122.5°	566.0	565.6	565.3	564.6	563.6	562.6	561.6	560.6
125°	618.0	617.3	616.6	616.0	615.5	614.9	614.4	613.9
127.5°	665.5	665.2	664.8	663.9	662.7	661.4	660.1	658.8
130°	696.5	696.0	695.5	694.8	693.9	693.1	692.2	691.3
132.5°	725.5	725.4	725.3	724.8	724.0	723.1	722.2	721.4
135°	768.1	767.7	767.4	766.7	765.6	764.6	763.5	762.5
137.5°	807.7	807.7	807.8	807.4	806.5	805.6	804.7	803.8
140°	832.0	832.4	832.7	832.4	831.3	830.3	829.2	828.2
142.5°	855.9	855.9	856.0	855.5	854.5	853.4	852.4	851.3
145°	889.5	889.7	889.9	889.4	888.4	887.4	886.3	885.3
147.5°	918.4	918.6	918.8	918.3	917.0	915.8	914.5	913.3
150°	936.8	937.2	937.5	937.0	935.6	934.2	932.8	931.4
152.5°	953.1	953.4	953.8	953.3	952.1	950.8	949.6	948.3
155°	975.5	976.0	976.5	976.1	974.7	973.3	971.9	970.5
157.5°	994.0	994.6	995.1	994.7	993.3	991.9	990.5	989.1
160°	1005.5	1006.2	1006.9	1006.6	1005.2	1003.8	1002.4	1001.0
162.5°	1016.1	1017.1	1018.0	1017.8	1016.2	1014.7	1013.2	1011.7
165°	1029.7	1030.7	1031.8	1031.6	1030.2	1028.8	1027.4	1026.0
167.5°	1040.0	1041.2	1042.5	1042.3	1040.7	1039.2	1037.6	1036.1
170°	1045.2	1046.6	1048.0	1047.9	1046.4	1044.8	1043.2	1041.7
172.5°	1049.3	1050.6	1051.9	1051.7	1050.1	1048.6	1047.0	1045.4
175°	1053.8	1055.2	1056.6	1056.5	1055.0	1053.4	1051.9	1050.3
177.5°	1055.7	1056.6	1057.6	1057.6	1056.4	1055.3	1054.2	1053.1
180°	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0	1055.0

(END OF REPORT)