

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: P333182

Luminaire Tested: **S125DIP-S610D810U835-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333182
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: S125DIP-S610D810U835-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5206.4 lumens
Efficiency: N/A
Efficacy: 135.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: General Diffuse

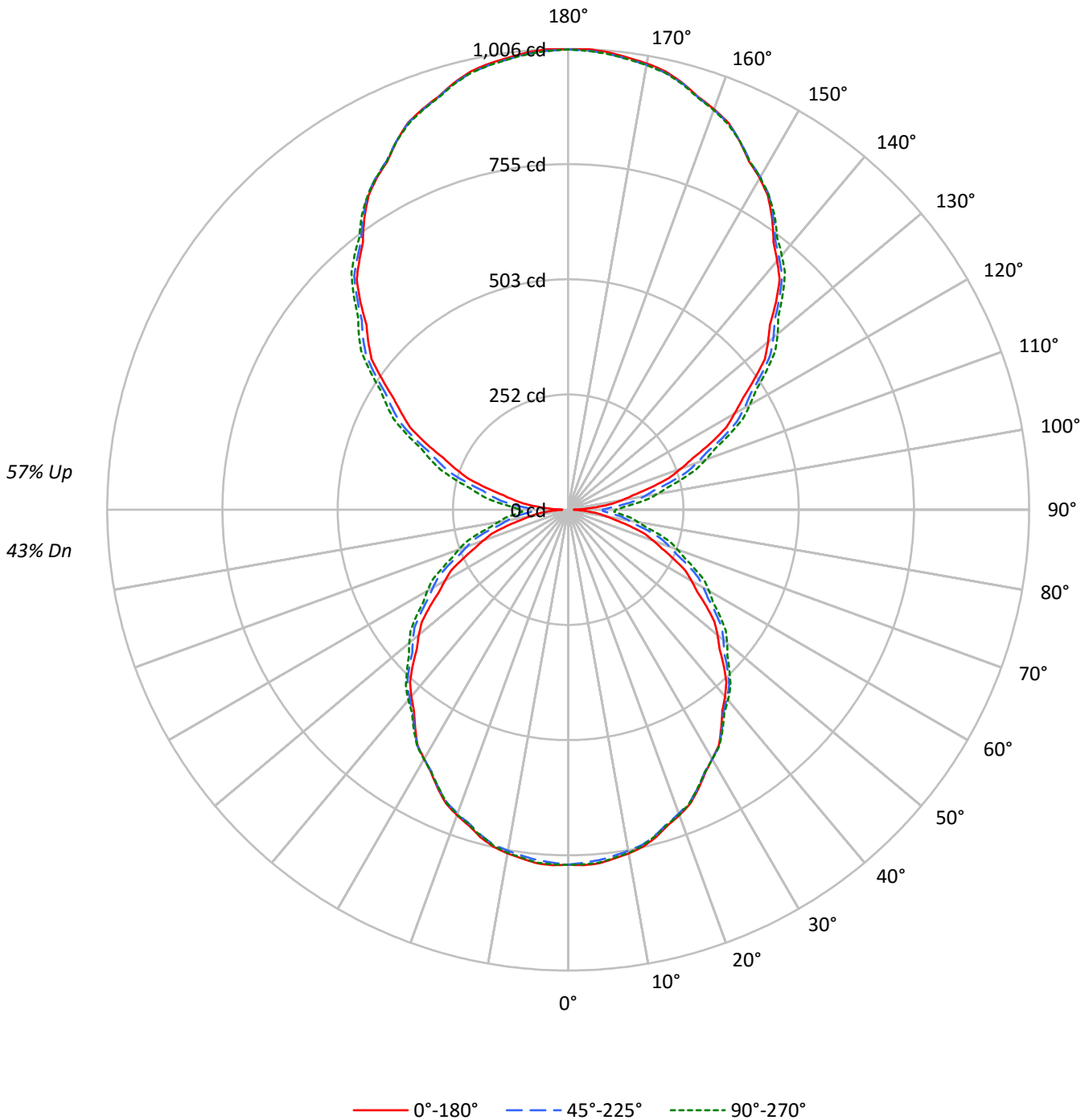
Input Watts (W): 38.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333182

CATALOG NUMBER: S125DIP-S610D810U835-4F0-1E-UDD-D1

Luminous Intensity Polar Plot





TEST NUMBER: P333182

CATALOG NUMBER: S125DIP-S610D810U835-4F0-1E-UDD-D1

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5005	5005	5005
5°	5015	4912	4928
10°	4980	4825	4817
15°	4920	4720	4677
20°	4840	4590	4536
25°	4745	4451	4363
30°	4630	4298	4206
35°	4523	4158	4062
40°	4413	4010	3916
45°	4289	3884	3788
50°	4172	3746	3674
55°	4029	3616	3540
60°	3875	3468	3404
65°	3713	3314	3250
70°	3527	3103	3093
75°	3237	2899	2899
80°	2857	2653	2687
85°	2502	2488	2620



TEST NUMBER: P333182

CATALOG NUMBER: S125DIP-S610D810U835-4F0-1E-UDD-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	73.3	1.4
10°-20°	208.0	4.0
20°-30°	309.4	5.9
30°-40°	366.5	7.0
40°-50°	378.9	7.3
50°-60°	349.0	6.7
60°-70°	282.1	5.4
70°-80°	189.0	3.6
80°-90°	100.2	1.9
90°-100°	122.3	2.3
100°-110°	239.3	4.6
110°-120°	363.8	7.0
120°-130°	458.4	8.8
130°-140°	503.1	9.7
140°-150°	487.9	9.4
150°-160°	408.6	7.8
160°-170°	271.6	5.2
170°-180°	95.1	1.8
0°-30°	590.7	11.3
0°-40°	957.1	18.4
0°-60°	1685.1	32.4
0°-90°	2256.3	43.3
90°-120°	725.3	13.9
90°-150°	2174.8	41.8
90°-180°	2950.0	56.7
0°-180°	5206.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	775	775	775	775	775	
5°	775	773	768	774	774	73
15°	740	740	736	740	737	208
25°	672	674	670	673	669	309
35°	582	587	585	587	587	364
45°	479	488	492	497	498	370
55°	368	381	393	401	404	329
65°	254	271	290	300	304	252
75°	140	160	184	198	203	148
85°	42	67	94	110	116	45
90°	13	44	75	95	104	11
95°	61	83	116	137	145	62
105°	185	202	229	248	256	198
115°	342	351	371	384	388	338
125°	495	500	515	525	528	443
135°	641	645	651	661	662	494
145°	776	778	780	784	785	485
155°	887	887	888	890	887	408
165°	964	963	963	966	962	272
175°	1002	1000	999	1003	999	95
180°	1005	1005	1005	1005	1005	



TEST NUMBER: P333182

CATALOG NUMBER: S125DIP-S610D810U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0
2.5°	776.8	776.5	776.3	776.0	775.7	775.1	774.2	773.2	772.3	771.3	772.3
5°	775.0	774.6	774.3	774.0	773.6	772.9	771.7	770.5	769.3	768.1	769.5
7.5°	768.1	768.0	767.9	767.7	767.6	766.9	765.7	764.5	763.3	762.1	763.2
10°	762.1	762.1	762.1	762.1	762.1	761.4	760.0	758.7	757.3	756.0	757.2
12.5°	753.6	753.7	753.8	754.0	754.1	753.6	752.5	751.5	750.4	749.3	750.2
15°	740.0	740.2	740.4	740.5	740.7	740.2	739.0	737.8	736.7	735.5	736.5
17.5°	722.4	722.7	723.1	723.4	723.8	723.3	722.2	721.0	719.8	718.6	719.4
20°	709.6	710.0	710.3	710.7	711.0	710.6	709.4	708.2	707.0	705.8	706.3
22.5°	695.1	695.7	696.3	696.9	697.5	697.1	695.8	694.5	693.2	691.9	692.5
25°	672.4	672.9	673.4	673.9	674.4	674.2	673.2	672.2	671.1	670.1	670.8
27.5°	647.2	647.9	648.7	649.4	650.2	650.0	648.8	647.7	646.5	645.4	645.8
30°	628.3	629.4	630.4	631.4	632.4	632.4	631.4	630.4	629.4	628.3	628.7
32.5°	611.3	612.2	613.1	614.0	614.8	614.9	614.2	613.4	612.7	611.9	612.3
35°	582.0	583.2	584.4	585.5	586.7	587.1	586.6	586.0	585.5	585.0	585.5
37.5°	552.7	553.8	554.8	555.9	557.0	557.4	557.3	557.1	556.9	556.8	557.4
40°	532.6	534.0	535.3	536.7	538.0	538.6	538.4	538.3	538.1	537.9	538.6
42.5°	510.7	512.5	514.2	516.0	517.8	518.8	519.2	519.6	519.9	520.3	521.1
45°	479.4	481.3	483.1	485.0	486.9	488.2	489.1	489.9	490.7	491.6	492.8
47.5°	447.4	449.1	450.8	452.5	454.3	455.8	457.3	458.7	460.2	461.6	463.4
50°	425.5	427.3	429.2	431.1	432.9	434.8	436.6	438.5	440.3	442.2	444.1
52.5°	402.4	404.6	406.9	409.2	411.4	413.7	416.0	418.2	420.5	422.7	424.7
55°	368.5	371.2	373.9	376.6	379.3	382.0	384.7	387.4	390.1	392.8	394.7
57.5°	333.9	337.1	340.3	343.6	346.8	350.0	353.1	356.2	359.3	362.4	364.5
60°	310.8	314.1	317.5	320.9	324.3	327.6	331.0	334.4	337.8	341.1	343.7
62.5°	288.3	291.6	295.0	298.4	301.8	305.3	308.9	312.6	316.2	319.9	322.7
65°	253.8	257.7	261.5	265.4	269.3	273.3	277.3	281.4	285.4	289.5	292.0
67.5°	221.3	225.0	228.7	232.5	236.2	240.2	244.3	248.4	252.5	256.7	259.7
70°	197.5	201.4	205.3	209.2	213.1	217.2	221.6	226.0	230.4	234.8	238.0
72.5°	174.4	178.5	182.5	186.5	190.5	194.9	199.7	204.5	209.3	214.1	217.6
75°	139.8	144.2	148.6	153.0	157.4	162.3	167.7	173.1	178.5	183.9	187.2
77.5°	106.5	111.6	116.7	121.7	126.8	131.9	137.1	142.3	147.5	152.7	156.4
80°	85.9	90.9	96.0	101.1	106.1	111.5	117.3	123.0	128.7	134.5	138.2
82.5°	67.0	72.3	77.7	83.0	88.4	94.0	99.8	105.7	111.6	117.5	121.0
85°	41.8	47.4	52.9	58.5	64.1	69.8	75.7	81.6	87.5	93.5	97.2
87.5°	23.9	29.5	35.2	40.9	46.6	52.4	58.4	64.4	70.4	76.4	80.4
90°	12.9	19.7	26.5	33.3	40.1	47.0	53.9	60.9	67.9	74.8	79.6
92.5°	29.9	35.8	41.8	47.8	53.7	60.4	67.8	75.2	82.5	89.9	94.8
95°	60.7	65.4	70.2	74.9	79.7	85.8	93.2	100.7	108.2	115.7	120.6
97.5°	93.4	97.5	101.6	105.7	109.8	115.8	123.7	131.7	139.6	147.5	152.2
100°	117.8	121.4	124.9	128.5	132.0	137.6	145.3	152.9	160.6	168.3	173.4
102.5°	144.1	148.1	152.1	156.0	160.0	165.2	171.6	178.0	184.4	190.9	196.0
105°	185.1	188.7	192.3	195.8	199.4	204.2	210.4	216.5	222.6	228.7	233.1
107.5°	230.5	233.7	236.8	240.0	243.2	247.6	253.2	258.9	264.6	270.2	274.1
110°	261.8	264.7	267.6	270.5	273.4	277.5	282.7	287.9	293.2	298.4	302.2



TEST NUMBER: P333182

CATALOG NUMBER: S125DIP-S610D810U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	294.3	296.4	298.5	300.5	302.6	306.3	311.5	316.8	322.0	327.3	330.6
115°	341.6	343.5	345.3	347.2	349.1	352.4	357.1	361.9	366.6	371.3	374.2
117.5°	389.0	390.1	391.2	392.3	393.3	396.1	400.6	405.1	409.5	414.0	417.0
120°	419.0	420.4	421.8	423.1	424.5	427.2	431.3	435.3	439.4	443.5	446.3
122.5°	450.9	451.5	452.0	452.6	453.1	455.5	459.7	463.9	468.1	472.3	474.9
125°	494.9	495.8	496.6	497.5	498.4	500.6	504.1	507.7	511.2	514.8	517.2
127.5°	541.0	541.5	541.9	542.3	542.7	544.4	547.4	550.4	553.4	556.3	558.7
130°	569.2	569.9	570.6	571.3	572.0	573.7	576.4	579.1	581.8	584.5	586.7
132.5°	596.7	598.1	599.5	600.9	602.3	603.9	605.6	607.4	609.1	610.9	613.1
135°	641.2	642.0	642.9	643.8	644.7	645.8	647.1	648.5	649.8	651.2	653.4
137.5°	682.9	683.8	684.7	685.5	686.4	687.3	688.3	689.2	690.2	691.2	693.4
140°	709.2	710.1	710.9	711.8	712.7	713.5	714.2	714.8	715.5	716.2	718.4
142.5°	736.1	736.7	737.3	737.9	738.5	739.1	739.8	740.5	741.2	741.9	743.7
145°	775.7	776.2	776.7	777.3	777.8	778.3	778.8	779.3	779.9	780.4	781.2
147.5°	811.5	811.9	812.3	812.7	813.0	813.4	813.9	814.3	814.7	815.1	815.8
150°	835.9	835.7	835.6	835.4	835.2	835.5	836.2	836.9	837.6	838.3	838.3
152.5°	855.9	856.2	856.4	856.7	856.9	857.2	857.4	857.7	858.0	858.3	858.7
155°	886.7	886.7	886.7	886.7	886.7	886.8	887.0	887.2	887.3	887.5	888.2
157.5°	914.3	913.9	913.5	913.1	912.7	912.6	912.8	913.0	913.1	913.3	914.0
160°	930.5	930.0	929.5	929.0	928.4	928.3	928.4	928.6	928.8	929.0	929.7
162.5°	944.9	944.5	944.1	943.8	943.4	943.2	943.2	943.3	943.3	943.4	944.2
165°	964.2	963.8	963.5	963.1	962.8	962.7	962.8	963.0	963.2	963.4	964.1
167.5°	980.4	979.7	979.0	978.3	977.6	977.3	977.3	977.3	977.3	977.3	978.3
170°	989.2	988.5	987.8	987.1	986.4	986.0	986.0	986.0	986.0	986.0	987.1
172.5°	995.4	994.7	994.0	993.3	992.6	992.3	992.3	992.3	992.3	992.3	993.3
175°	1002.5	1001.8	1001.1	1000.4	999.7	999.3	999.3	999.3	999.3	999.3	1000.4
177.5°	1006.1	1005.5	1005.0	1004.4	1003.8	1003.5	1003.4	1003.2	1003.1	1002.9	1003.8
180°	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8



TEST NUMBER: P333182

CATALOG NUMBER: S125DIP-S610D810U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	775.0	775.0	775.0	775.0	775.0	775.0	775.0	775.0
2.5°	773.2	774.2	775.1	775.5	775.4	775.3	775.1	775.0
5°	770.8	772.2	773.5	774.1	774.0	773.8	773.6	773.5
7.5°	764.4	765.6	766.8	767.3	767.1	767.0	766.8	766.6
10°	758.4	759.5	760.7	761.2	761.1	760.9	760.7	760.5
12.5°	751.1	752.0	753.0	753.2	752.7	752.3	751.9	751.4
15°	737.5	738.5	739.5	739.7	739.0	738.3	737.7	737.0
17.5°	720.2	720.9	721.7	721.9	721.5	721.1	720.7	720.3
20°	706.9	707.4	707.9	708.1	708.1	708.1	708.1	708.1
22.5°	693.1	693.8	694.4	694.5	694.1	693.7	693.3	692.9
25°	671.5	672.2	672.8	672.8	671.9	671.1	670.2	669.4
27.5°	646.3	646.8	647.3	647.3	647.0	646.7	646.4	646.1
30°	629.0	629.4	629.7	629.8	629.6	629.4	629.3	629.1
32.5°	612.6	612.9	613.3	613.4	613.2	613.0	612.9	612.7
35°	586.0	586.6	587.1	587.3	587.3	587.3	587.3	587.3
37.5°	558.1	558.8	559.5	559.8	559.7	559.6	559.6	559.5
40°	539.3	540.0	540.6	541.1	541.5	541.8	542.2	542.5
42.5°	521.9	522.7	523.5	524.0	524.1	524.1	524.2	524.3
45°	493.9	495.1	496.3	497.0	497.2	497.3	497.5	497.7
47.5°	465.1	466.8	468.5	469.6	470.0	470.3	470.7	471.1
50°	445.9	447.8	449.6	450.8	451.3	451.8	452.3	452.8
52.5°	426.7	428.7	430.7	431.9	432.3	432.6	433.0	433.4
55°	396.5	398.4	400.2	401.5	402.2	402.9	403.5	404.2
57.5°	366.7	368.8	370.9	372.2	372.8	373.3	373.8	374.3
60°	346.2	348.7	351.3	352.8	353.3	353.8	354.3	354.8
62.5°	325.5	328.3	331.1	332.8	333.4	334.1	334.7	335.4
65°	294.5	297.1	299.6	301.2	301.9	302.6	303.2	303.9
67.5°	262.8	265.9	268.9	270.9	271.8	272.7	273.6	274.4
70°	241.2	244.4	247.6	249.7	250.7	251.7	252.8	253.8
72.5°	221.1	224.5	228.0	230.1	230.9	231.6	232.4	233.1
75°	190.6	194.0	197.4	199.5	200.3	201.2	202.0	202.9
77.5°	160.1	163.9	167.6	169.8	170.4	171.1	171.8	172.5
80°	141.9	145.6	149.3	151.5	152.2	152.9	153.6	154.2
82.5°	124.6	128.2	131.8	134.2	135.4	136.6	137.8	139.0
85°	100.9	104.6	108.3	110.8	112.2	113.5	114.9	116.2
87.5°	84.5	88.5	92.6	95.3	96.5	97.8	99.1	100.4
90°	84.3	89.1	93.8	97.1	98.8	100.5	102.2	103.9
92.5°	99.7	104.6	109.5	112.7	114.3	115.8	117.4	119.0
95°	125.5	130.5	135.4	138.6	140.2	141.7	143.2	144.7
97.5°	156.9	161.6	166.3	169.3	170.7	172.0	173.4	174.8
100°	178.5	183.6	188.7	191.9	193.3	194.7	196.0	197.4
102.5°	201.1	206.2	211.3	214.6	216.1	217.6	219.1	220.6
105°	237.5	241.9	246.4	249.4	251.1	252.8	254.5	256.2
107.5°	278.0	281.8	285.7	288.1	289.1	290.1	291.2	292.2
110°	305.9	309.6	313.4	315.7	316.7	317.7	318.8	319.8



TEST NUMBER: P333182

CATALOG NUMBER: S125DIP-S610D810U835-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	333.9	337.2	340.6	342.7	343.5	344.4	345.3	346.1
115°	377.1	379.9	382.8	384.7	385.5	386.3	387.2	388.0
117.5°	420.0	423.0	426.0	427.8	428.2	428.7	429.1	429.6
120°	449.2	452.1	454.9	456.5	456.9	457.2	457.5	457.8
122.5°	477.5	480.1	482.7	484.2	484.7	485.1	485.6	486.0
125°	519.5	521.9	524.2	525.7	526.4	527.1	527.7	528.4
127.5°	561.0	563.3	565.6	567.1	567.8	568.4	569.0	569.6
130°	588.9	591.1	593.3	594.7	595.1	595.6	596.1	596.6
132.5°	615.3	617.5	619.7	620.9	621.1	621.3	621.5	621.7
135°	655.6	657.8	660.0	661.1	661.3	661.4	661.6	661.7
137.5°	695.6	697.8	700.0	701.0	700.8	700.6	700.4	700.2
140°	720.6	722.8	725.0	726.1	725.9	725.7	725.5	725.3
142.5°	745.5	747.3	749.1	749.9	749.7	749.5	749.3	749.1
145°	782.1	782.9	783.8	784.3	784.4	784.6	784.7	784.9
147.5°	816.5	817.2	817.9	817.8	816.9	816.0	815.1	814.3
150°	838.3	838.3	838.3	838.2	838.0	837.8	837.6	837.5
152.5°	859.1	859.5	859.9	859.9	859.3	858.7	858.1	857.5
155°	888.9	889.6	890.3	890.2	889.3	888.5	887.6	886.7
157.5°	914.7	915.4	916.1	915.9	914.7	913.6	912.4	911.3
160°	930.4	931.0	931.7	931.7	930.8	929.9	929.0	928.2
162.5°	945.0	945.9	946.7	946.6	945.6	944.6	943.6	942.6
165°	964.8	965.5	966.1	966.0	964.9	963.9	962.8	961.8
167.5°	979.4	980.4	981.5	981.4	980.4	979.3	978.2	977.1
170°	988.1	989.2	990.2	990.1	988.9	987.7	986.5	985.3
172.5°	994.4	995.4	996.5	996.5	995.4	994.3	993.2	992.1
175°	1001.4	1002.5	1003.5	1003.4	1002.2	1001.0	999.8	998.6
177.5°	1004.6	1005.4	1006.3	1006.2	1005.2	1004.3	1003.3	1002.3
180°	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8	1004.8

(END OF REPORT)