

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: P333236-927

Luminaire Tested: **S125DIP-S850D1035U927-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333236-927
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-S850D1035U927-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5437.3 lumens
Efficiency: N/A
Efficacy: 104.6 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

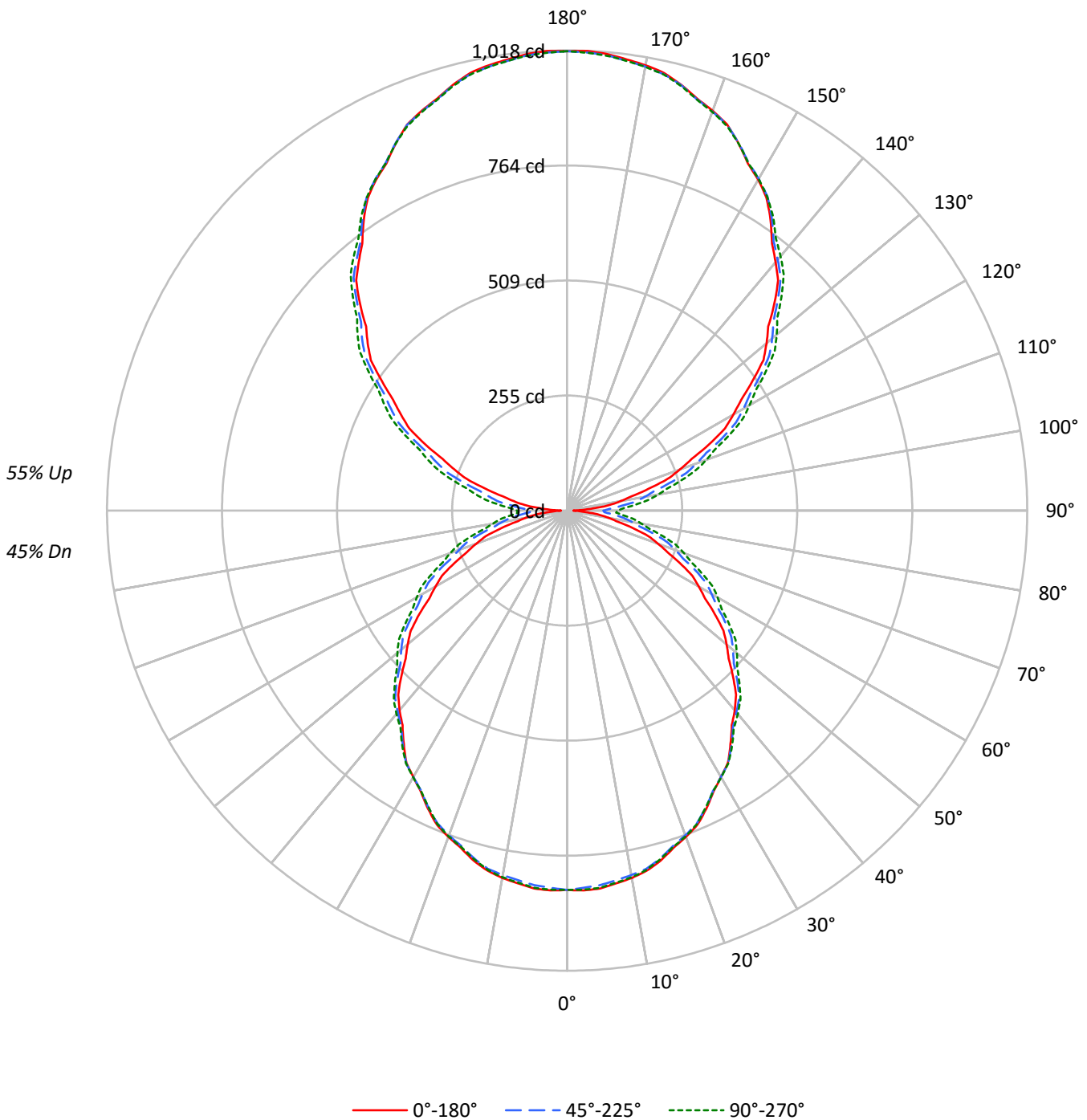
Input Watts (W): 52
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333236-927

CATALOG NUMBER: S125DIP-S850D1035U927-4F0-1E-UDD-D1

Luminous Intensity Polar Plot





TEST NUMBER: P333236-927

CATALOG NUMBER: S125DIP-S850D1035U927-4F0-1E-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	81	81	81	65	65	65	51	51	51	45
1	96	91	87	84	88	84	80	77	70	67	65	56	55	53	44	43	42	36
2	87	79	73	68	79	73	67	63	61	56	53	49	46	44	39	37	35	30
3	79	70	62	56	72	64	57	52	53	48	44	43	40	37	34	32	29	25
4	72	61	53	47	66	56	49	44	47	42	37	38	34	31	30	28	25	21
5	66	55	46	40	60	50	43	38	42	36	32	34	30	27	27	24	22	18
6	61	49	41	35	56	45	38	32	38	32	28	31	27	23	25	22	19	16
7	56	44	36	30	51	41	33	28	34	29	25	28	24	21	22	19	17	14
8	52	40	32	27	48	37	30	25	31	26	22	26	21	18	21	17	15	13
9	49	36	29	24	44	34	27	22	28	23	19	24	19	16	19	16	14	11
10	45	33	26	21	42	31	24	20	26	21	17	22	18	15	18	15	12	10

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5420	5420	5420
5°	5431	5320	5337
10°	5392	5225	5217
15°	5329	5111	5064
20°	5241	4970	4912
25°	5139	4820	4724
30°	5014	4654	4554
35°	4897	4502	4398
40°	4778	4342	4241
45°	4644	4205	4102
50°	4517	4056	3979
55°	4363	3916	3833
60°	4195	3756	3686
65°	4020	3589	3520
70°	3820	3359	3349
75°	3505	3139	3139
80°	3093	2872	2910
85°	2705	2693	2839



TEST NUMBER: P333236-927

CATALOG NUMBER: S125DIP-S850D1035U927-4F0-1E-UDD-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	79.4	1.5
10°-20°	225.3	4.1
20°-30°	335.0	6.2
30°-40°	396.8	7.3
40°-50°	410.3	7.5
50°-60°	377.9	7.0
60°-70°	305.5	5.6
70°-80°	204.6	3.8
80°-90°	108.3	2.0
90°-100°	127.6	2.3
100°-110°	244.9	4.5
110°-120°	369.9	6.8
120°-130°	464.8	8.5
130°-140°	509.3	9.4
140°-150°	493.5	9.1
150°-160°	413.3	7.6
160°-170°	274.7	5.1
170°-180°	96.1	1.8
0°-30°	639.6	11.8
0°-40°	1036.4	19.1
0°-60°	1824.7	33.6
0°-90°	2443.1	44.9
90°-120°	742.4	13.7
90°-150°	2210.0	40.6
90°-180°	2994.0	55.1
0°-180°	5437.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	839	839	839	839	839	
5°	839	837	832	838	838	80
15°	801	802	796	801	798	226
25°	728	730	726	729	725	335
35°	630	636	634	636	636	394
45°	519	528	532	538	539	400
55°	399	412	425	434	438	357
65°	275	294	314	325	329	273
75°	151	173	199	215	220	161
85°	45	72	101	119	126	48
90°	14	47	80	102	111	12
95°	62	86	121	144	152	63
105°	188	206	234	255	264	200
115°	346	356	378	391	396	342
125°	501	505	522	533	537	448
135°	649	653	659	669	671	500
145°	785	787	789	793	794	490
155°	897	897	898	900	897	413
165°	975	974	974	977	973	275
175°	1014	1011	1011	1015	1010	96
180°	1016	1016	1016	1016	1016	



TEST NUMBER: P333236-927

CATALOG NUMBER: S125DIP-S850D1035U927-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2
2.5°	841.1	840.9	840.6	840.3	840.0	839.3	838.3	837.3	836.2	835.2	836.2
5°	839.2	838.8	838.4	838.0	837.7	836.9	835.6	834.3	833.1	831.8	833.2
7.5°	831.8	831.6	831.5	831.3	831.2	830.4	829.2	827.8	826.5	825.2	826.5
10°	825.2	825.2	825.2	825.2	825.2	824.5	823.0	821.6	820.1	818.6	819.9
12.5°	815.9	816.1	816.3	816.4	816.6	816.0	814.9	813.7	812.5	811.4	812.4
15°	801.4	801.5	801.7	801.8	802.1	801.5	800.3	799.0	797.6	796.4	797.5
17.5°	782.3	782.6	783.0	783.3	783.7	783.2	782.0	780.7	779.4	778.2	779.0
20°	768.4	768.8	769.1	769.5	769.9	769.4	768.2	766.9	765.6	764.3	764.9
22.5°	752.7	753.3	753.9	754.6	755.3	754.9	753.4	752.0	750.6	749.2	749.9
25°	728.1	728.6	729.2	729.8	730.3	730.0	729.0	727.9	726.7	725.6	726.4
27.5°	700.8	701.6	702.4	703.2	704.0	703.8	702.6	701.3	700.1	698.9	699.3
30°	680.4	681.5	682.6	683.7	684.8	684.8	683.7	682.6	681.5	680.4	680.8
32.5°	661.9	662.9	663.8	664.8	665.7	665.8	665.0	664.2	663.5	662.7	663.0
35°	630.2	631.5	632.8	634.1	635.3	635.7	635.2	634.6	634.1	633.5	634.1
37.5°	598.4	599.6	600.8	602.0	603.2	603.6	603.4	603.2	603.1	602.9	603.6
40°	576.7	578.2	579.6	581.1	582.6	583.2	583.0	582.9	582.7	582.5	583.2
42.5°	553.0	554.9	556.8	558.7	560.6	561.8	562.2	562.6	563.0	563.4	564.3
45°	519.1	521.2	523.2	525.1	527.2	528.6	529.6	530.4	531.4	532.3	533.6
47.5°	484.4	486.3	488.1	490.0	491.9	493.6	495.2	496.8	498.3	499.9	501.8
50°	460.7	462.7	464.8	466.8	468.7	470.8	472.8	474.8	476.8	478.8	480.9
52.5°	435.7	438.2	440.6	443.1	445.5	448.0	450.4	452.9	455.3	457.8	459.9
55°	399.0	402.0	404.9	407.8	410.7	413.7	416.6	419.5	422.4	425.3	427.4
57.5°	361.5	365.0	368.5	372.0	375.6	379.0	382.4	385.7	389.0	392.4	394.7
60°	336.5	340.2	343.8	347.5	351.1	354.8	358.5	362.1	365.8	369.4	372.2
62.5°	312.1	315.8	319.5	323.1	326.8	330.6	334.5	338.5	342.4	346.3	349.4
65°	274.8	279.0	283.2	287.4	291.6	295.9	300.3	304.7	309.1	313.5	316.2
67.5°	239.6	243.7	247.7	251.8	255.8	260.1	264.5	269.0	273.5	277.9	281.2
70°	213.9	218.1	222.3	226.6	230.8	235.2	240.0	244.7	249.5	254.2	257.7
72.5°	188.9	193.2	197.6	201.9	206.3	211.0	216.3	221.5	226.6	231.9	235.6
75°	151.4	156.1	160.9	165.6	170.4	175.7	181.6	187.4	193.2	199.1	202.7
77.5°	115.3	120.8	126.4	131.8	137.3	142.8	148.5	154.1	159.7	165.4	169.4
80°	93.0	98.5	103.9	109.4	114.9	120.7	127.0	133.2	139.4	145.6	149.6
82.5°	72.6	78.3	84.1	89.9	95.7	101.7	108.1	114.5	120.8	127.2	131.1
85°	45.2	51.3	57.4	63.4	69.4	75.6	82.0	88.4	94.8	101.2	105.2
87.5°	25.8	31.9	38.1	44.2	50.4	56.6	63.1	69.6	76.0	82.5	86.9
90°	13.9	21.2	28.4	35.7	43.0	50.3	57.8	65.2	72.6	80.1	85.2
92.5°	31.0	37.4	43.8	50.1	56.6	63.7	71.6	79.5	87.3	95.2	100.4
95°	62.1	67.2	72.3	77.4	82.5	89.0	97.0	105.0	113.0	121.0	126.2
97.5°	95.1	99.6	103.9	108.4	112.8	119.2	127.6	136.1	144.5	152.9	157.9
100°	119.8	123.6	127.5	131.3	135.1	141.1	149.2	157.4	165.5	173.6	179.1
102.5°	146.3	150.6	154.8	159.1	163.3	168.9	175.7	182.6	189.5	196.3	201.8
105°	187.7	191.5	195.4	199.2	203.0	208.1	214.7	221.2	227.8	234.2	239.0
107.5°	233.5	236.9	240.3	243.7	247.0	251.8	257.8	263.9	270.0	276.0	280.2
110°	265.1	268.2	271.3	274.4	277.4	281.8	287.5	293.1	298.7	304.4	308.4



TEST NUMBER: P333236-927

CATALOG NUMBER: S125DIP-S850D1035U927-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	298.1	300.3	302.5	304.7	306.9	310.9	316.5	322.1	327.7	333.4	337.0
115°	345.8	347.8	349.7	351.7	353.7	357.3	362.4	367.5	372.6	377.7	380.8
117.5°	393.7	394.8	396.0	397.2	398.3	401.3	406.2	410.9	415.7	420.6	423.8
120°	424.1	425.5	426.9	428.3	429.8	432.7	437.0	441.5	445.8	450.2	453.3
122.5°	456.3	456.9	457.5	458.0	458.6	461.1	465.6	470.2	474.7	479.2	482.0
125°	500.7	501.6	502.5	503.4	504.2	506.6	510.4	514.3	518.1	521.9	524.5
127.5°	547.4	547.8	548.2	548.7	549.1	550.9	554.1	557.3	560.5	563.7	566.3
130°	575.8	576.6	577.3	578.0	578.6	580.4	583.4	586.3	589.1	592.1	594.5
132.5°	603.6	605.1	606.5	607.8	609.3	610.9	612.8	614.7	616.6	618.5	620.9
135°	648.6	649.4	650.3	651.2	652.0	653.2	654.7	656.2	657.6	659.0	661.4
137.5°	690.8	691.7	692.5	693.4	694.3	695.2	696.2	697.3	698.2	699.3	701.6
140°	717.3	718.3	719.1	720.0	720.9	721.7	722.4	723.1	723.8	724.5	726.9
142.5°	744.6	745.1	745.8	746.3	746.9	747.6	748.3	749.0	749.7	750.4	752.3
145°	784.6	785.1	785.6	786.2	786.6	787.2	787.7	788.2	788.8	789.3	790.2
147.5°	820.8	821.2	821.6	822.0	822.3	822.8	823.2	823.6	823.9	824.4	825.1
150°	845.4	845.3	845.1	844.9	844.8	845.0	845.7	846.4	847.1	847.8	847.8
152.5°	865.7	865.9	866.2	866.4	866.6	867.0	867.2	867.5	867.8	868.1	868.5
155°	896.8	896.8	896.8	896.8	896.8	896.9	897.1	897.3	897.5	897.6	898.3
157.5°	924.7	924.3	923.9	923.5	923.1	923.1	923.2	923.4	923.6	923.8	924.5
160°	941.1	940.6	940.1	939.5	939.1	938.9	939.1	939.2	939.4	939.5	940.2
162.5°	955.7	955.3	954.9	954.5	954.2	953.9	954.0	954.0	954.1	954.1	955.0
165°	975.2	974.8	974.5	974.1	973.8	973.7	973.8	974.0	974.1	974.4	975.1
167.5°	991.6	990.9	990.2	989.5	988.8	988.4	988.4	988.4	988.4	988.4	989.5
170°	1000.4	999.7	999.0	998.4	997.7	997.3	997.3	997.3	997.3	997.3	998.4
172.5°	1006.8	1006.1	1005.4	1004.6	1004.0	1003.6	1003.6	1003.6	1003.6	1003.6	1004.6
175°	1013.9	1013.2	1012.5	1011.8	1011.1	1010.7	1010.7	1010.7	1010.7	1010.7	1011.8
177.5°	1017.6	1017.0	1016.4	1015.8	1015.3	1014.9	1014.8	1014.6	1014.5	1014.4	1015.3
180°	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3



TEST NUMBER: P333236-927

CATALOG NUMBER: S125DIP-S850D1035U927-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	839.2	839.2	839.2	839.2	839.2	839.2	839.2	839.2
2.5°	837.3	838.3	839.3	839.8	839.6	839.5	839.3	839.2
5°	834.7	836.1	837.7	838.3	838.0	837.9	837.7	837.6
7.5°	827.8	829.0	830.3	830.8	830.7	830.5	830.3	830.1
10°	821.2	822.4	823.7	824.3	824.1	823.9	823.7	823.6
12.5°	813.3	814.4	815.3	815.6	815.1	814.6	814.1	813.7
15°	798.6	799.7	800.8	801.0	800.3	799.5	798.8	798.0
17.5°	779.8	780.7	781.5	781.7	781.3	780.9	780.4	780.0
20°	765.4	766.0	766.5	766.8	766.8	766.8	766.8	766.8
22.5°	750.6	751.2	751.9	752.1	751.6	751.2	750.8	750.4
25°	727.1	727.9	728.6	728.5	727.5	726.7	725.7	724.8
27.5°	699.8	700.4	700.8	701.0	700.6	700.3	700.0	699.7
30°	681.1	681.5	681.8	682.0	681.8	681.6	681.4	681.2
32.5°	663.4	663.7	664.1	664.2	664.0	663.8	663.6	663.5
35°	634.6	635.2	635.7	636.0	636.0	636.0	636.0	636.0
37.5°	604.4	605.1	605.8	606.2	606.1	606.0	605.9	605.9
40°	583.9	584.7	585.4	586.0	586.3	586.7	587.1	587.4
42.5°	565.1	566.0	566.9	567.4	567.4	567.5	567.6	567.7
45°	534.9	536.1	537.4	538.1	538.4	538.5	538.7	538.9
47.5°	503.6	505.5	507.3	508.5	508.9	509.3	509.7	510.1
50°	482.8	484.9	486.9	488.1	488.7	489.3	489.8	490.4
52.5°	462.1	464.2	466.4	467.7	468.1	468.5	468.9	469.3
55°	429.4	431.4	433.4	434.7	435.5	436.3	437.0	437.7
57.5°	397.0	399.3	401.6	403.1	403.6	404.2	404.7	405.3
60°	374.9	377.6	380.4	382.0	382.5	383.1	383.7	384.2
62.5°	352.4	355.5	358.5	360.4	361.1	361.8	362.4	363.1
65°	318.9	321.7	324.4	326.1	326.9	327.6	328.4	329.1
67.5°	284.6	287.9	291.2	293.3	294.3	295.2	296.2	297.1
70°	261.2	264.7	268.2	270.4	271.5	272.6	273.7	274.8
72.5°	239.4	243.1	246.9	249.2	250.0	250.8	251.6	252.4
75°	206.4	210.1	213.7	216.0	216.9	217.9	218.7	219.7
77.5°	173.4	177.4	181.5	183.9	184.6	185.3	186.0	186.8
80°	153.7	157.7	161.7	164.1	164.9	165.6	166.3	167.0
82.5°	134.9	138.8	142.7	145.3	146.6	147.9	149.2	150.6
85°	109.2	113.3	117.3	120.0	121.5	122.9	124.5	125.9
87.5°	91.3	95.6	100.1	102.9	104.3	105.7	107.0	108.4
90°	90.3	95.4	100.4	103.9	105.7	107.5	109.3	111.1
92.5°	105.7	110.8	116.1	119.5	121.2	122.9	124.5	126.2
95°	131.4	136.7	142.0	145.4	147.0	148.7	150.3	151.9
97.5°	162.9	167.9	172.9	176.1	177.6	179.0	180.5	182.0
100°	184.5	189.9	195.4	198.8	200.3	201.7	203.1	204.5
102.5°	207.2	212.5	218.0	221.5	223.1	224.7	226.2	227.8
105°	243.7	248.4	253.1	256.4	258.2	260.0	261.8	263.6
107.5°	284.3	288.5	292.6	295.2	296.4	297.5	298.6	299.6
110°	312.4	316.4	320.4	323.0	324.1	325.2	326.3	327.4



TEST NUMBER: P333236-927

CATALOG NUMBER: S125DIP-S850D1035U927-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	340.6	344.1	347.7	350.0	350.9	351.9	352.8	353.8
115°	383.9	387.1	390.1	392.2	393.1	394.0	394.9	395.9
117.5°	427.1	430.3	433.6	435.5	436.0	436.6	437.0	437.6
120°	456.5	459.5	462.6	464.4	464.8	465.2	465.6	466.0
122.5°	484.8	487.7	490.5	492.2	492.7	493.2	493.8	494.3
125°	527.0	529.7	532.2	533.9	534.6	535.4	536.1	536.9
127.5°	568.8	571.2	573.8	575.4	576.2	576.9	577.6	578.3
130°	596.8	599.2	601.6	603.1	603.6	604.2	604.8	605.3
132.5°	623.3	625.7	628.1	629.4	629.7	629.9	630.3	630.5
135°	663.8	666.1	668.5	669.9	670.0	670.3	670.5	670.7
137.5°	704.0	706.4	708.8	709.9	709.7	709.6	709.4	709.2
140°	729.2	731.6	734.0	735.1	734.9	734.7	734.6	734.5
142.5°	754.2	756.2	758.1	759.0	758.8	758.7	758.6	758.4
145°	791.2	792.0	793.0	793.5	793.7	793.9	794.1	794.3
147.5°	825.9	826.6	827.3	827.2	826.3	825.5	824.6	823.7
150°	847.8	847.8	847.8	847.7	847.6	847.4	847.2	847.1
152.5°	868.9	869.3	869.7	869.7	869.1	868.5	867.9	867.3
155°	899.0	899.8	900.5	900.4	899.5	898.6	897.7	896.8
157.5°	925.1	925.8	926.5	926.3	925.2	924.0	922.8	921.7
160°	941.0	941.7	942.4	942.3	941.4	940.6	939.7	938.7
162.5°	955.8	956.6	957.5	957.4	956.4	955.4	954.3	953.3
165°	975.7	976.4	977.2	977.0	976.0	974.9	973.8	972.8
167.5°	990.5	991.6	992.7	992.6	991.6	990.5	989.4	988.2
170°	999.4	1000.4	1001.5	1001.4	1000.2	998.9	997.8	996.5
172.5°	1005.8	1006.8	1007.8	1007.8	1006.7	1005.7	1004.6	1003.5
175°	1012.9	1013.9	1014.9	1014.9	1013.7	1012.4	1011.1	1010.0
177.5°	1016.1	1016.9	1017.7	1017.7	1016.7	1015.7	1014.7	1013.8
180°	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3	1016.3

(END OF REPORT)