

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: P333263-927

Luminaire Tested: **S125DIP-S1090D590U927-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333263-927
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-S1090D590U927-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5000.3 lumens
Efficiency: N/A
Efficacy: 102.5 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: Semi-Direct

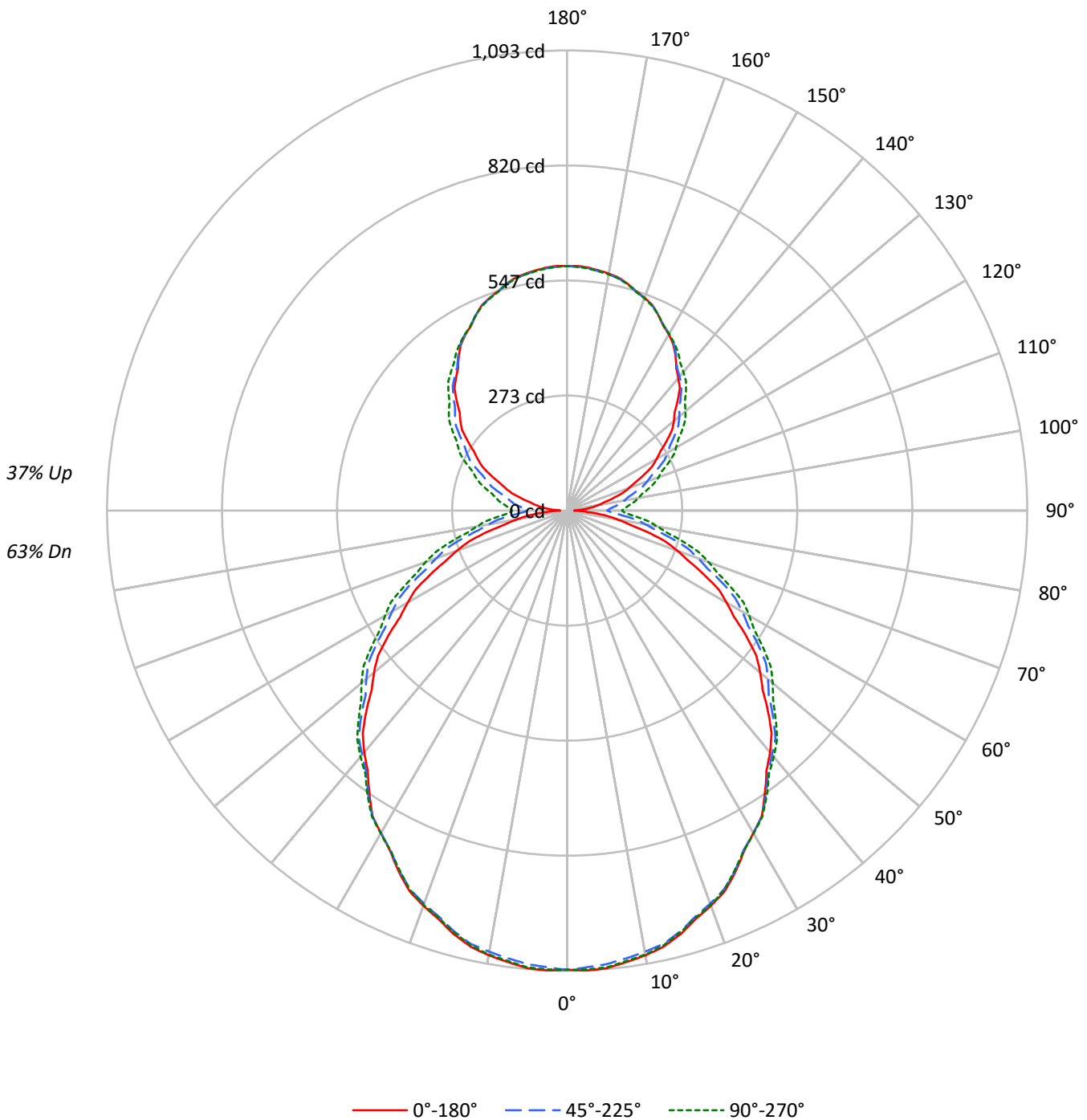
Input Watts (W): 48.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333263-927

CATALOG NUMBER: S125DIP-S1090D590U927-4F0-1E-UDD-D1

Luminous Intensity Polar Plot





TEST NUMBER: P333263-927

CATALOG NUMBER: S125DIP-S1090D590U927-4F0-1E-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	110	110	110	110	104	104	104	104	91	91	91		79	79	79		68	68	68	63
1	100	95	91	87	93	89	85	82	78	75	73		68	66	64		59	57	56	52
2	91	82	76	70	85	77	72	67	68	63	60		59	56	53		51	49	46	42
3	82	72	64	58	77	68	61	55	60	54	50		52	48	44		45	42	39	35
4	75	64	55	49	70	60	52	47	53	47	42		46	42	38		40	37	33	30
5	69	57	48	42	64	54	46	40	47	41	36		42	37	33		36	32	29	26
6	64	51	42	36	59	48	40	35	43	36	32		38	32	28		33	29	25	23
7	59	46	38	32	55	43	36	30	39	32	28		34	29	25		30	26	23	20
8	55	42	34	28	51	40	32	27	35	29	25		31	26	22		27	23	20	18
9	51	38	30	25	48	36	29	24	32	26	22		29	24	20		25	21	18	16
10	48	35	28	23	45	33	26	22	30	24	20		27	22	18		24	19	17	15

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7045	7045	7045
5°	7059	6915	6937
10°	7008	6791	6781
15°	6926	6644	6583
20°	6814	6461	6385
25°	6679	6266	6141
30°	6517	6050	5920
35°	6366	5853	5717
40°	6211	5644	5513
45°	6037	5466	5331
50°	5872	5272	5172
55°	5671	5090	4983
60°	5453	4881	4791
65°	5225	4664	4575
70°	4967	4366	4353
75°	4557	4080	4079
80°	4018	3734	3783
85°	3519	3499	3689



TEST NUMBER: P333263-927

CATALOG NUMBER: S125DIP-S1090D590U927-4F0-1E-UDD-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.1	2.1
10°-20°	292.8	5.9
20°-30°	435.5	8.7
30°-40°	515.8	10.3
40°-50°	533.3	10.7
50°-60°	491.3	9.8
60°-70°	397.1	7.9
70°-80°	265.9	5.3
80°-90°	139.2	2.8
90°-100°	116.3	2.3
100°-110°	171.9	3.4
110°-120°	232.8	4.7
120°-130°	277.7	5.6
130°-140°	296.4	5.9
140°-150°	283.1	5.7
150°-160°	236.2	4.7
160°-170°	157.0	3.1
170°-180°	54.9	1.1
0°-30°	831.4	16.6
0°-40°	1347.2	26.9
0°-60°	2371.8	47.4
0°-90°	3174.0	63.5
90°-120°	521.0	10.4
90°-150°	1378.2	27.6
90°-180°	1826.0	36.5
0°-180°	5000.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1091	1091	1091	1091	1091	
5°	1091	1088	1081	1089	1089	103
15°	1042	1042	1035	1041	1037	293
25°	946	949	943	947	942	435
35°	819	826	824	826	827	512
45°	675	686	692	699	700	521
55°	519	536	553	564	569	463
65°	357	382	407	423	428	354
75°	197	225	259	279	286	209
85°	59	94	132	154	164	63
90°	18	56	95	121	131	13
95°	43	73	113	139	148	42
105°	113	133	167	190	200	120
115°	201	212	239	257	264	199
125°	288	291	312	328	333	258
135°	372	374	381	395	399	287
145°	449	450	451	456	459	280
155°	512	512	513	514	512	236
165°	557	556	557	558	556	157
175°	579	578	578	580	577	55
180°	581	581	581	581	581	



TEST NUMBER: P333263-927

CATALOG NUMBER: S125DIP-S1090D590U927-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8
2.5°	1093.4	1093.0	1092.6	1092.3	1091.9	1091.0	1089.6	1088.3	1087.0	1085.7	1087.0
5°	1090.8	1090.4	1089.9	1089.4	1088.9	1087.8	1086.2	1084.5	1082.8	1081.2	1083.1
7.5°	1081.2	1081.0	1080.8	1080.6	1080.5	1079.5	1077.8	1076.0	1074.4	1072.6	1074.3
10°	1072.6	1072.6	1072.6	1072.6	1072.6	1071.7	1069.8	1067.9	1066.0	1064.1	1065.7
12.5°	1060.7	1060.8	1061.0	1061.2	1061.4	1060.7	1059.2	1057.7	1056.2	1054.6	1056.0
15°	1041.6	1041.9	1042.1	1042.4	1042.6	1041.9	1040.2	1038.6	1036.9	1035.2	1036.6
17.5°	1016.8	1017.2	1017.7	1018.2	1018.7	1018.1	1016.4	1014.8	1013.1	1011.5	1012.6
20°	998.9	999.3	999.8	1000.3	1000.8	1000.1	998.5	996.8	995.1	993.5	994.2
22.5°	978.3	979.1	980.0	980.9	981.8	981.2	979.4	977.6	975.7	973.8	974.7
25°	946.4	947.1	947.8	948.6	949.3	949.0	947.5	946.1	944.7	943.3	944.2
27.5°	910.9	912.0	913.0	914.1	915.1	914.8	913.2	911.6	910.0	908.4	909.0
30°	884.4	885.8	887.2	888.7	890.1	890.1	888.7	887.2	885.8	884.4	884.9
32.5°	860.5	861.7	862.9	864.2	865.4	865.5	864.4	863.4	862.4	861.3	861.8
35°	819.2	820.9	822.5	824.2	825.9	826.3	825.6	824.9	824.2	823.5	824.2
37.5°	777.9	779.4	780.9	782.4	783.9	784.7	784.4	784.2	783.9	783.7	784.7
40°	749.6	751.5	753.4	755.3	757.2	758.1	757.9	757.6	757.4	757.2	758.1
42.5°	718.8	721.4	723.8	726.3	728.7	730.2	730.8	731.3	731.8	732.4	733.5
45°	674.8	677.4	680.0	682.6	685.2	687.1	688.3	689.5	690.7	691.9	693.6
47.5°	629.7	632.1	634.5	636.9	639.4	641.6	643.6	645.7	647.8	649.7	652.2
50°	598.9	601.5	604.1	606.7	609.3	612.0	614.6	617.2	619.8	622.4	625.0
52.5°	566.3	569.6	572.7	575.9	579.1	582.3	585.5	588.7	591.8	595.0	597.9
55°	518.6	522.4	526.2	530.0	533.9	537.7	541.5	545.3	549.1	552.9	555.5
57.5°	469.9	474.4	479.0	483.6	488.1	492.7	497.0	501.4	505.7	510.1	513.1
60°	437.4	442.1	446.9	451.6	456.4	461.1	465.9	470.6	475.4	480.1	483.7
62.5°	405.8	410.5	415.3	420.0	424.8	429.7	434.8	440.0	445.1	450.2	454.2
65°	357.2	362.7	368.1	373.6	379.1	384.6	390.3	396.0	401.7	407.4	411.0
67.5°	311.4	316.7	321.9	327.3	332.5	338.0	343.9	349.7	355.5	361.2	365.6
70°	278.1	283.5	289.0	294.5	299.9	305.7	311.9	318.1	324.2	330.4	334.9
72.5°	245.6	251.2	256.8	262.5	268.2	274.3	281.1	287.9	294.6	301.3	306.3
75°	196.8	203.0	209.1	215.3	221.5	228.4	236.0	243.6	251.2	258.8	263.6
77.5°	150.0	157.1	164.2	171.3	178.5	185.7	193.0	200.3	207.6	214.9	220.1
80°	120.8	127.9	135.1	142.2	149.3	156.9	165.0	173.1	181.2	189.3	194.5
82.5°	94.3	101.8	109.3	116.8	124.4	132.2	140.5	148.8	157.1	165.3	170.4
85°	58.8	66.6	74.5	82.3	90.2	98.2	106.5	114.9	123.2	131.5	136.7
87.5°	33.4	41.2	49.0	56.7	64.5	72.5	80.7	89.0	97.2	105.4	111.0
90°	17.6	26.0	34.4	42.8	51.2	59.8	68.6	77.4	86.1	94.9	100.9
92.5°	26.3	33.9	41.5	49.1	56.7	65.1	74.2	83.3	92.5	101.6	107.6
95°	43.3	49.7	56.0	62.4	68.8	76.5	85.6	94.7	103.8	112.9	118.8
97.5°	61.4	67.1	72.7	78.3	84.0	91.4	100.6	109.8	118.9	128.1	133.8
100°	75.0	80.0	85.0	90.0	95.0	102.0	110.8	119.8	128.7	137.6	143.5
102.5°	89.8	94.7	99.7	104.7	109.8	116.3	124.4	132.5	140.5	148.6	154.4
105°	112.6	117.0	121.3	125.6	129.9	135.9	143.6	151.4	159.1	166.8	172.2
107.5°	138.2	141.9	145.6	149.3	153.0	158.6	165.9	173.2	180.5	187.8	192.8
110°	155.7	159.1	162.4	165.8	169.1	174.3	181.3	188.2	195.1	202.1	206.9



TEST NUMBER: P333263-927

CATALOG NUMBER: S125DIP-S1090D590U927-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	174.5	177.1	179.6	182.1	184.7	189.4	196.2	203.0	209.9	216.7	221.3
115°	201.2	203.3	205.3	207.4	209.5	213.7	220.1	226.4	232.8	239.2	243.4
117.5°	228.0	229.3	230.5	231.8	233.1	236.7	242.7	248.7	254.8	260.8	264.9
120°	245.3	246.5	247.7	249.0	250.2	253.6	259.1	264.7	270.3	275.8	279.9
122.5°	263.2	263.8	264.3	264.8	265.3	268.3	273.9	279.4	284.9	290.5	294.3
125°	288.5	288.9	289.2	289.6	290.0	292.6	297.5	302.3	307.1	312.0	315.6
127.5°	314.6	314.7	314.8	314.9	315.0	317.0	321.1	325.1	329.1	333.1	336.5
130°	330.8	331.1	331.4	331.6	331.9	333.8	337.3	340.9	344.4	347.9	351.2
132.5°	346.3	347.1	347.8	348.6	349.4	351.0	353.6	356.1	358.6	361.2	364.3
135°	371.8	372.2	372.6	372.9	373.3	374.3	376.1	377.9	379.6	381.4	384.4
137.5°	395.9	396.2	396.6	397.0	397.4	398.1	399.1	400.1	401.2	402.2	405.1
140°	410.5	411.0	411.5	412.0	412.5	413.0	413.6	414.2	414.6	415.2	418.0
142.5°	426.0	426.3	426.5	426.7	427.0	427.3	427.8	428.2	428.6	429.0	431.3
145°	448.9	449.1	449.2	449.4	449.6	449.8	450.1	450.4	450.8	451.0	452.2
147.5°	469.0	469.2	469.4	469.7	469.9	470.1	470.3	470.6	470.9	471.1	471.7
150°	483.1	483.0	482.9	482.8	482.7	482.8	483.2	483.6	484.0	484.4	484.4
152.5°	494.6	494.8	495.0	495.1	495.2	495.4	495.5	495.7	495.8	496.1	496.3
155°	512.5	512.5	512.5	512.5	512.5	512.5	512.6	512.7	512.9	512.9	513.3
157.5°	528.4	528.1	527.9	527.8	527.5	527.4	527.5	527.7	527.8	527.8	528.2
160°	537.8	537.5	537.2	536.9	536.5	536.5	536.5	536.7	536.8	536.9	537.3
162.5°	546.1	545.9	545.7	545.4	545.2	545.1	545.1	545.2	545.2	545.2	545.7
165°	557.2	557.0	556.8	556.6	556.4	556.3	556.4	556.6	556.7	556.7	557.1
167.5°	566.6	566.3	565.8	565.4	565.0	564.8	564.8	564.8	564.8	564.8	565.4
170°	571.6	571.2	570.8	570.5	570.1	569.9	569.9	569.9	569.9	569.9	570.5
172.5°	575.3	574.9	574.5	574.1	573.7	573.5	573.5	573.5	573.5	573.5	574.1
175°	579.3	578.9	578.5	578.1	577.7	577.6	577.6	577.6	577.6	577.6	578.1
177.5°	581.5	581.1	580.8	580.5	580.1	580.0	579.9	579.8	579.7	579.6	580.1
180°	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7



TEST NUMBER: P333263-927

CATALOG NUMBER: S125DIP-S1090D590U927-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8	1090.8
2.5°	1088.3	1089.6	1091.0	1091.5	1091.4	1091.2	1091.0	1090.8
5°	1085.0	1086.9	1088.8	1089.6	1089.4	1089.2	1088.9	1088.7
7.5°	1075.9	1077.6	1079.3	1080.0	1079.7	1079.5	1079.3	1079.0
10°	1067.4	1069.1	1070.7	1071.4	1071.2	1071.0	1070.7	1070.5
12.5°	1057.2	1058.5	1059.8	1060.1	1059.5	1058.9	1058.3	1057.6
15°	1038.1	1039.5	1040.9	1041.2	1040.2	1039.3	1038.3	1037.4
17.5°	1013.7	1014.7	1015.8	1016.1	1015.5	1014.9	1014.4	1013.8
20°	994.9	995.6	996.3	996.7	996.7	996.7	996.7	996.7
22.5°	975.7	976.5	977.4	977.6	977.0	976.4	975.9	975.3
25°	945.2	946.1	947.1	946.9	945.7	944.5	943.3	942.1
27.5°	909.7	910.4	911.0	911.2	910.7	910.3	909.8	909.4
30°	885.3	885.8	886.3	886.5	886.2	886.0	885.7	885.5
32.5°	862.3	862.8	863.2	863.3	863.1	862.8	862.6	862.4
35°	824.9	825.6	826.3	826.6	826.6	826.6	826.6	826.6
37.5°	785.6	786.6	787.5	787.9	787.8	787.7	787.6	787.5
40°	759.1	760.0	761.0	761.7	762.2	762.6	763.1	763.6
42.5°	734.6	735.8	736.9	737.5	737.6	737.7	737.8	737.9
45°	695.2	696.9	698.5	699.5	699.7	700.0	700.2	700.4
47.5°	654.7	657.0	659.5	660.9	661.5	662.0	662.5	663.1
50°	627.6	630.3	632.9	634.5	635.3	636.0	636.7	637.4
52.5°	600.6	603.4	606.3	607.9	608.4	609.0	609.5	610.0
55°	558.1	560.7	563.3	565.1	566.1	567.0	568.0	568.9
57.5°	516.1	519.1	522.1	523.9	524.7	525.4	526.1	526.8
60°	487.3	490.8	494.4	496.5	497.3	498.0	498.7	499.4
62.5°	458.1	462.1	466.0	468.4	469.4	470.2	471.1	472.1
65°	414.5	418.1	421.7	424.0	424.9	425.9	426.8	427.8
67.5°	369.9	374.2	378.6	381.4	382.5	383.8	385.0	386.3
70°	339.5	344.0	348.5	351.5	352.9	354.3	355.8	357.2
72.5°	311.2	316.1	320.9	323.9	325.0	326.0	327.0	328.1
75°	268.3	273.1	277.8	280.7	281.9	283.1	284.3	285.5
77.5°	225.4	230.6	235.8	238.9	239.9	240.8	241.8	242.7
80°	199.7	204.9	210.2	213.3	214.2	215.2	216.1	217.1
82.5°	175.4	180.5	185.4	188.9	190.6	192.3	194.0	195.7
85°	142.0	147.2	152.4	156.0	157.9	159.8	161.7	163.6
87.5°	116.5	122.1	127.6	131.3	133.0	134.8	136.5	138.2
90°	106.9	112.8	118.8	122.8	124.7	126.7	128.7	130.6
92.5°	113.5	119.5	125.4	129.3	131.2	133.1	134.9	136.8
95°	124.7	130.6	136.6	140.5	142.4	144.3	146.1	148.0
97.5°	139.4	145.0	150.8	154.4	156.1	157.9	159.6	161.4
100°	149.4	155.3	161.1	164.9	166.5	168.2	169.8	171.4
102.5°	160.2	166.0	171.7	175.5	177.2	179.0	180.6	182.4
105°	177.5	182.9	188.2	191.9	193.8	195.8	197.8	199.8
107.5°	197.8	202.8	207.9	211.0	212.5	214.0	215.4	216.9
110°	211.8	216.6	221.3	224.6	226.1	227.7	229.3	230.8



TEST NUMBER: P333263-927

CATALOG NUMBER: S125DIP-S1090D590U927-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	225.7	230.1	234.6	237.6	239.1	240.6	242.0	243.5
115°	247.6	251.8	255.9	258.6	260.0	261.3	262.6	264.0
117.5°	269.0	273.1	277.3	280.0	281.1	282.4	283.6	284.8
120°	283.9	288.0	292.0	294.5	295.6	296.6	297.6	298.7
122.5°	298.0	301.8	305.5	308.0	309.1	310.2	311.3	312.4
125°	319.2	322.8	326.5	328.8	329.9	331.0	332.0	333.1
127.5°	339.9	343.4	346.8	349.1	350.3	351.4	352.6	353.8
130°	354.3	357.6	360.8	362.9	363.9	364.9	365.9	366.9
132.5°	367.6	370.8	374.1	376.0	376.7	377.5	378.2	378.9
135°	387.5	390.6	393.7	395.7	396.5	397.3	398.1	398.9
137.5°	408.1	411.0	413.9	415.6	416.1	416.5	416.9	417.4
140°	420.8	423.7	426.4	428.1	428.6	429.0	429.4	429.8
142.5°	433.7	436.1	438.5	439.8	440.3	440.8	441.2	441.6
145°	453.4	454.6	455.7	456.7	457.3	458.0	458.7	459.3
147.5°	472.3	472.9	473.6	473.7	473.5	473.2	473.0	472.7
150°	484.4	484.4	484.4	484.5	484.5	484.6	484.6	484.7
152.5°	496.5	496.8	497.0	496.9	496.6	496.3	496.0	495.7
155°	513.7	514.1	514.5	514.5	514.0	513.5	512.9	512.5
157.5°	528.6	529.0	529.4	529.3	528.6	528.0	527.4	526.6
160°	537.7	538.1	538.4	538.4	538.0	537.4	536.9	536.5
162.5°	546.1	546.6	547.2	547.1	546.5	545.9	545.3	544.7
165°	557.5	557.9	558.4	558.3	557.7	557.1	556.4	555.9
167.5°	566.0	566.6	567.2	567.2	566.6	565.9	565.3	564.7
170°	571.1	571.6	572.3	572.2	571.6	570.8	570.1	569.4
172.5°	574.7	575.3	575.9	575.9	575.3	574.6	574.0	573.4
175°	578.8	579.3	580.0	579.9	579.2	578.5	577.8	577.1
177.5°	580.6	581.1	581.5	581.5	581.0	580.4	579.8	579.2
180°	580.7	580.7	580.7	580.7	580.7	580.7	580.7	580.7

(END OF REPORT)