

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: P333572-927

Luminaire Tested: **S125RDIP-S850D1035U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333572-927
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: S125RDIP-S850D1035U927-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5411.5 lumens
Efficiency: N/A
Efficacy: 104.1 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

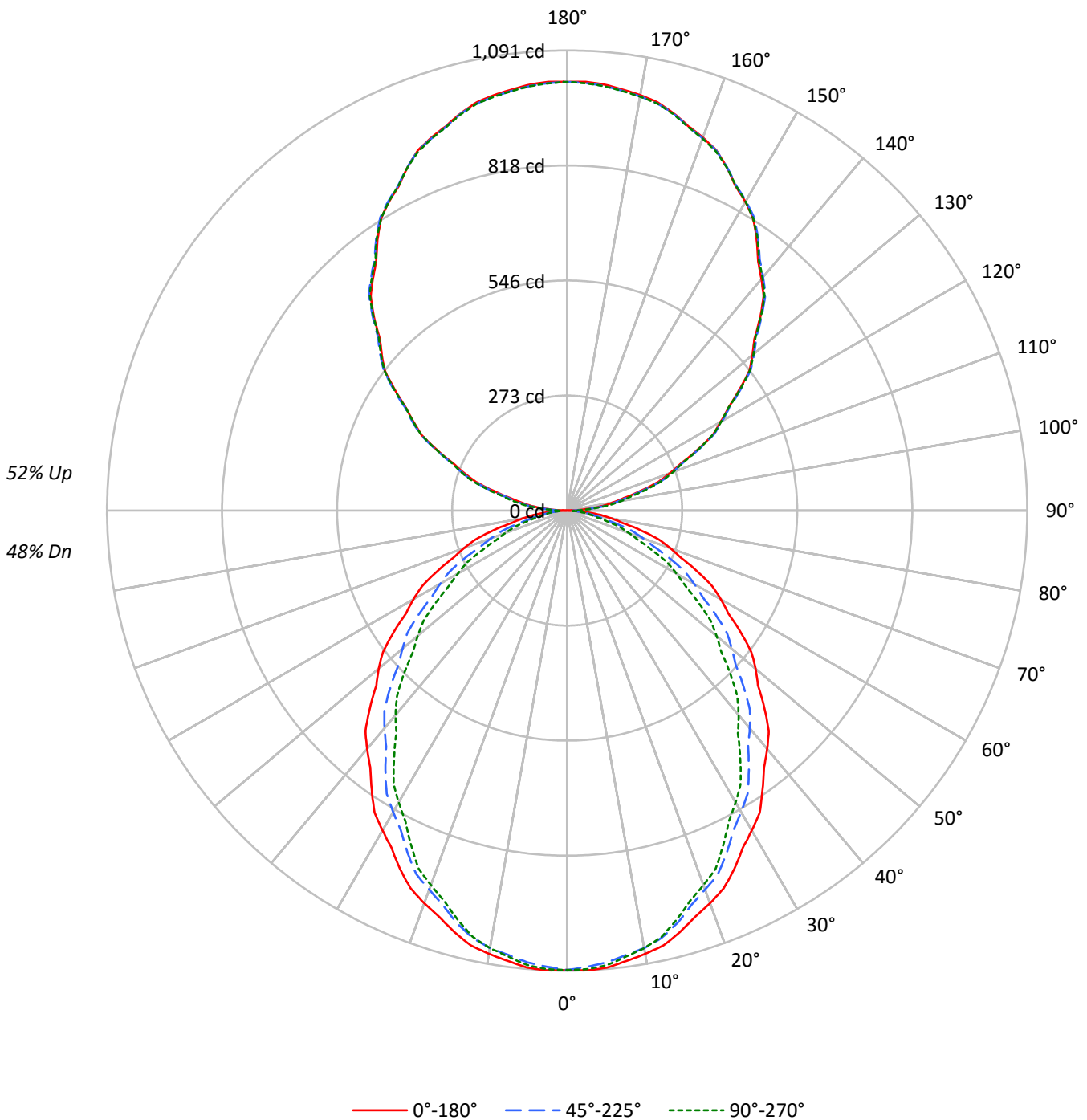
Input Watts (W): 52
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	107	107	107	107	98	98	98	98	82	82	82	67	67	67	54	54	54	48
1	97	93	89	86	90	86	83	80	72	70	68	60	58	57	48	47	46	41
2	89	82	76	71	82	75	70	66	63	60	56	53	50	47	42	41	39	34
3	81	72	65	59	74	66	60	55	56	51	48	47	43	40	38	35	33	29
4	74	64	56	50	68	59	52	47	50	45	41	42	38	35	34	31	29	25
5	68	57	49	43	63	53	46	40	45	39	35	37	33	30	31	28	25	22
6	63	51	43	37	58	47	40	35	40	35	31	34	30	27	28	25	22	19
7	58	46	38	33	53	43	36	31	37	31	27	31	27	24	25	22	20	17
8	54	42	34	29	50	39	32	27	33	28	24	28	24	21	23	20	18	16
9	50	38	31	26	46	36	29	24	31	25	22	26	22	19	22	18	16	14
10	47	35	28	23	43	33	26	22	28	23	20	24	20	17	20	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7035	7035	7035
5°	7052	6971	7014
10°	6998	6906	6906
15°	6915	6766	6711
20°	6808	6570	6491
25°	6683	6379	6238
30°	6528	6154	5957
35°	6370	5922	5643
40°	6222	5681	5334
45°	6042	5411	4997
50°	5861	5117	4646
55°	5650	4835	4271
60°	5441	4495	3867
65°	5193	4099	3406
70°	4910	3603	2936
75°	4517	3039	2443
80°	3976	2388	2049
85°	3349	1949	1830



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.4	1.9
10°-20°	286.2	5.3
20°-30°	415.1	7.7
30°-40°	473.1	8.7
40°-50°	461.1	8.5
50°-60°	388.2	7.2
60°-70°	272.1	5.0
70°-80°	139.9	2.6
80°-90°	37.6	0.7
90°-100°	68.1	1.3
100°-110°	201.0	3.7
110°-120°	340.5	6.3
120°-130°	448.1	8.3
130°-140°	502.1	9.3
140°-150°	492.1	9.1
150°-160°	413.3	7.6
160°-170°	274.7	5.1
170°-180°	96.1	1.8
0°-30°	803.8	14.9
0°-40°	1276.8	23.6
0°-60°	2126.1	39.3
0°-90°	2575.6	47.6
90°-120°	609.5	11.3
90°-150°	2051.7	37.9
90°-180°	2836.0	52.4
0°-180°	5411.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1089	1089	1089	1089	1089	
5°	1088	1084	1075	1083	1082	103
15°	1034	1029	1012	1011	1004	291
25°	938	925	895	885	875	431
35°	808	787	751	728	716	506
45°	662	636	592	561	547	510
55°	502	474	429	394	379	449
65°	340	311	268	236	223	336
75°	181	156	122	104	98	192
85°	45	31	26	26	25	51
90°	1	7	13	17	19	5
95°	51	53	61	66	68	55
105°	180	184	189	194	196	193
115°	341	344	346	345	344	337
125°	498	502	503	501	501	445
135°	647	652	652	652	649	498
145°	784	787	789	789	787	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: P333572-927

CATALOG NUMBER: S125RDIP-S850D1035U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3
2.5°	1091.2	1090.8	1090.4	1090.0	1089.5	1088.5	1087.1	1085.6	1084.2	1082.7	1084.2
5°	1087.7	1087.0	1086.2	1085.4	1084.7	1083.4	1081.3	1079.3	1077.3	1075.3	1077.1
7.5°	1077.0	1076.3	1075.5	1074.8	1074.2	1072.6	1070.2	1067.8	1065.4	1063.0	1064.2
10°	1067.1	1066.5	1066.0	1065.4	1064.9	1063.3	1060.8	1058.2	1055.7	1053.1	1053.6
12.5°	1055.9	1055.2	1054.5	1053.8	1053.1	1051.1	1047.6	1044.2	1040.8	1037.3	1037.7
15°	1034.2	1033.1	1032.0	1030.9	1029.8	1027.3	1023.5	1019.6	1015.8	1011.9	1011.8
17.5°	1009.6	1008.0	1006.3	1004.6	1002.9	999.7	994.8	990.0	985.2	980.3	979.5
20°	990.5	988.7	986.9	985.1	983.3	979.4	973.6	967.7	961.9	956.0	955.1
22.5°	969.5	967.7	965.8	964.0	962.2	958.2	952.0	945.9	939.8	933.7	931.8
25°	937.9	935.2	932.4	929.7	926.9	922.2	915.4	908.6	901.9	895.2	892.8
27.5°	901.7	898.4	895.1	891.8	888.4	883.1	875.9	868.6	861.4	854.1	850.8
30°	875.4	871.9	868.5	865.0	861.5	855.9	848.3	840.6	832.9	825.2	821.0
32.5°	849.7	845.7	841.6	837.6	833.5	827.5	819.8	811.9	804.1	796.2	791.6
35°	807.9	803.5	799.2	794.7	790.4	784.0	775.9	767.6	759.4	751.1	745.8
37.5°	766.9	761.6	756.3	750.9	745.6	738.7	730.2	721.7	713.2	704.7	698.4
40°	738.0	732.5	727.0	721.5	716.1	708.9	700.1	691.3	682.6	673.8	666.9
42.5°	707.7	702.1	696.5	690.8	685.2	677.9	668.8	659.7	650.6	641.6	634.9
45°	661.5	656.2	650.9	645.5	640.2	632.6	622.5	612.5	602.5	592.4	585.0
47.5°	613.6	608.0	602.4	596.8	591.2	583.4	573.2	563.1	552.9	542.8	535.3
50°	583.3	577.3	571.2	565.2	559.2	551.0	540.5	530.1	519.7	509.3	501.6
52.5°	550.4	544.2	538.1	531.9	525.7	517.7	507.9	498.0	488.1	478.3	470.1
55°	501.8	496.0	490.2	484.3	478.5	470.4	460.2	450.0	439.7	429.4	421.2
57.5°	452.8	446.6	440.3	434.0	427.9	419.8	409.9	400.0	390.1	380.2	372.2
60°	421.2	414.9	408.4	402.0	395.6	387.5	377.6	367.7	357.9	348.0	340.0
62.5°	387.7	381.6	375.5	369.3	363.2	355.2	345.2	335.2	325.1	315.1	307.7
65°	339.8	333.6	327.3	321.2	314.9	307.0	297.3	287.6	277.9	268.2	260.9
67.5°	292.2	286.0	279.8	273.6	267.4	259.6	250.3	241.1	231.8	222.4	215.8
70°	260.0	253.7	247.6	241.3	235.1	227.4	218.3	209.1	200.0	190.8	185.2
72.5°	228.4	222.3	216.3	210.2	204.1	196.8	188.2	179.7	171.1	162.6	157.3
75°	181.0	175.5	170.0	164.5	159.1	152.5	144.8	137.1	129.4	121.8	117.7
77.5°	134.0	129.5	125.2	120.8	116.4	111.1	105.0	98.9	92.7	86.6	83.7
80°	106.9	102.6	98.2	93.8	89.4	84.7	79.5	74.4	69.3	64.2	62.5
82.5°	80.6	76.7	72.7	68.8	64.8	61.1	57.6	54.1	50.5	47.1	46.3
85°	45.2	42.0	38.7	35.4	32.1	29.9	29.1	28.1	27.3	26.3	26.1
87.5°	15.3	14.6	13.8	13.1	12.4	12.0	12.1	12.2	12.3	12.4	12.6
90°	0.8	2.2	3.6	5.0	6.4	7.8	9.0	10.2	11.4	12.7	13.5
92.5°	19.2	20.1	21.1	22.1	23.1	24.3	25.8	27.3	28.8	30.3	31.5
95°	51.4	51.7	52.1	52.4	52.8	53.9	55.6	57.4	59.2	60.9	62.1
97.5°	85.4	85.6	85.7	85.9	86.0	87.3	89.7	92.1	94.5	97.0	98.2
100°	110.7	110.7	110.7	110.7	110.7	111.9	114.2	116.5	118.7	121.0	122.6
102.5°	137.9	138.6	139.3	140.1	140.8	141.6	142.8	144.0	145.1	146.3	148.1
105°	180.3	181.2	182.0	183.0	183.9	184.8	185.8	186.9	188.0	189.0	190.0
107.5°	227.1	228.0	228.9	229.8	230.7	231.5	232.3	233.1	233.9	234.7	235.3
110°	259.4	260.3	261.2	262.1	262.9	263.6	264.1	264.7	265.2	265.7	266.3



TEST NUMBER: P333572-927

CATALOG NUMBER: S125RDIP-S850D1035U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	292.3	292.8	293.2	293.7	294.1	294.7	295.4	296.0	296.7	297.4	297.6
115°	340.9	341.6	342.3	343.0	343.6	344.2	344.5	344.9	345.2	345.6	345.5
117.5°	389.6	389.9	390.2	390.5	390.9	391.2	391.5	391.8	392.1	392.4	392.6
120°	419.9	420.8	421.7	422.6	423.5	424.0	424.1	424.4	424.5	424.7	424.7
122.5°	452.9	453.2	453.5	453.8	454.2	454.5	455.0	455.4	455.9	456.3	456.2
125°	497.5	498.5	499.6	500.7	501.7	502.3	502.5	502.6	502.8	503.0	502.6
127.5°	544.9	545.5	546.1	546.7	547.3	547.7	548.0	548.1	548.3	548.6	548.3
130°	573.4	574.3	575.1	576.0	576.9	577.5	577.9	578.2	578.5	578.9	578.8
132.5°	601.8	603.3	604.8	606.2	607.6	608.3	608.2	608.2	608.1	608.0	607.8
135°	647.0	648.0	649.0	650.1	651.2	651.8	652.0	652.1	652.3	652.4	652.4
137.5°	689.4	690.3	691.3	692.4	693.4	694.1	694.5	694.9	695.3	695.6	695.9
140°	716.5	717.4	718.3	719.1	720.0	720.7	721.3	721.8	722.3	722.9	723.2
142.5°	743.7	744.5	745.2	745.9	746.7	747.4	748.1	748.8	749.4	750.0	750.3
145°	783.8	784.5	785.1	785.8	786.6	787.2	787.7	788.2	788.8	789.3	789.3
147.5°	820.8	821.2	821.6	822.0	822.3	822.8	823.2	823.6	823.9	824.4	824.8
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: P333572-927

CATALOG NUMBER: S125RDIP-S850D1035U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3
2.5°	1085.6	1087.1	1088.5	1089.3	1089.1	1088.9	1088.8	1088.6
5°	1079.0	1080.8	1082.6	1083.4	1083.0	1082.6	1082.3	1081.9
7.5°	1065.6	1066.8	1068.1	1068.5	1068.1	1067.7	1067.3	1066.9
10°	1054.2	1054.7	1055.3	1055.3	1054.7	1054.2	1053.6	1053.1
12.5°	1038.1	1038.5	1038.9	1038.7	1037.8	1037.0	1036.2	1035.3
15°	1011.6	1011.4	1011.2	1010.3	1008.7	1007.0	1005.4	1003.7
17.5°	978.5	977.6	976.7	975.6	974.2	972.9	971.5	970.2
20°	954.2	953.2	952.4	951.1	949.4	947.8	946.1	944.5
22.5°	930.0	928.3	926.5	924.9	923.5	922.2	920.8	919.5
25°	890.4	888.0	885.7	883.4	881.4	879.4	877.4	875.4
27.5°	847.5	844.1	840.8	838.2	836.3	834.3	832.4	830.4
30°	816.8	812.6	808.3	805.5	803.8	802.2	800.5	798.8
32.5°	787.0	782.3	777.7	774.3	772.2	770.2	768.0	766.0
35°	740.5	735.2	729.9	726.0	723.4	720.9	718.4	715.7
37.5°	692.1	685.6	679.3	674.9	672.4	669.9	667.4	665.0
40°	659.9	653.0	646.0	641.4	639.3	637.1	634.9	632.7
42.5°	628.3	621.6	615.0	610.0	606.8	603.6	600.3	597.1
45°	577.7	570.5	563.1	558.1	555.3	552.6	549.9	547.1
47.5°	527.8	520.2	512.7	507.4	504.4	501.4	498.3	495.3
50°	493.9	486.2	478.6	473.3	470.6	467.9	465.1	462.4
52.5°	461.8	453.5	445.3	439.7	437.0	434.3	431.6	428.8
55°	413.0	404.8	396.6	390.9	388.1	385.2	382.2	379.3
57.5°	364.2	356.2	348.1	342.8	340.2	337.5	335.0	332.4
60°	331.9	323.8	315.8	310.5	307.7	305.0	302.2	299.4
62.5°	300.2	292.7	285.3	280.2	277.4	274.6	272.0	269.2
65°	253.6	246.3	238.9	233.9	231.2	228.5	225.7	222.9
67.5°	209.1	202.4	195.7	191.2	189.1	186.9	184.7	182.5
70°	179.5	173.9	168.2	164.3	162.1	159.9	157.7	155.5
72.5°	152.1	146.9	141.6	138.3	136.8	135.4	134.0	132.5
75°	113.8	109.7	105.7	103.1	101.7	100.4	99.2	97.9
77.5°	80.9	78.1	75.3	73.4	72.5	71.5	70.6	69.6
80°	60.9	59.3	57.6	56.6	56.2	55.8	55.5	55.1
82.5°	45.6	44.8	44.0	43.5	43.3	43.1	42.9	42.6
85°	26.0	25.7	25.6	25.4	25.2	25.0	24.9	24.7
87.5°	12.8	12.9	13.1	13.2	13.2	13.1	13.1	13.0
90°	14.4	15.3	16.2	16.9	17.4	17.9	18.5	19.0
92.5°	32.7	33.8	35.0	35.8	36.2	36.5	36.9	37.3
95°	63.4	64.6	65.8	66.6	66.9	67.3	67.7	68.0
97.5°	99.3	100.4	101.6	102.3	102.5	102.7	102.9	103.1
100°	124.1	125.7	127.3	128.3	128.7	129.0	129.4	129.7
102.5°	149.7	151.5	153.2	154.3	154.8	155.3	155.8	156.3
105°	191.2	192.2	193.2	194.0	194.6	195.1	195.6	196.1
107.5°	235.8	236.3	236.9	237.1	237.0	237.0	237.0	236.9
110°	266.8	267.3	267.8	268.0	267.8	267.7	267.5	267.3



TEST NUMBER: P333572-927

CATALOG NUMBER: S125RDIP-S850D1035U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	297.9	298.1	298.3	298.3	298.0	297.7	297.4	297.1
115°	345.2	345.1	344.9	344.8	344.5	344.4	344.2	344.0
117.5°	392.7	392.8	393.0	392.7	392.0	391.3	390.6	389.9
120°	424.7	424.7	424.7	424.4	423.7	422.9	422.2	421.5
122.5°	456.1	455.9	455.7	455.4	454.9	454.3	453.8	453.2
125°	502.3	501.9	501.6	501.3	501.1	501.0	500.8	500.7
127.5°	548.2	548.0	547.9	547.6	547.2	546.8	546.5	546.2
130°	578.5	578.4	578.2	578.0	577.6	577.3	576.9	576.6
132.5°	607.7	607.5	607.3	607.0	606.5	606.0	605.5	605.0
135°	652.4	652.4	652.4	652.1	651.4	650.7	650.0	649.3
137.5°	696.1	696.2	696.5	696.2	695.3	694.4	693.6	692.7
140°	723.6	723.9	724.3	724.0	723.1	722.2	721.4	720.5
142.5°	750.5	750.7	750.9	750.6	749.7	748.8	748.0	747.0
145°	789.3	789.3	789.3	789.0	788.5	788.0	787.4	787.0
147.5°	825.2	825.7	826.1	825.7	824.5	823.3	822.1	820.9
150°	847.8	847.8	847.8	847.6	847.3	846.9	846.6	846.2
152.5°	868.9	869.3	869.7	869.7	869.0	868.4	867.8	867.1
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

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