

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: P333444-927

Luminaire Tested: **S125DIW-S1090D1050U927-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333444-927
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: S125DIW-S1090D1050U927-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1050 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6699.8 lumens
Efficiency: N/A
Efficacy: 109.5 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: General Diffuse

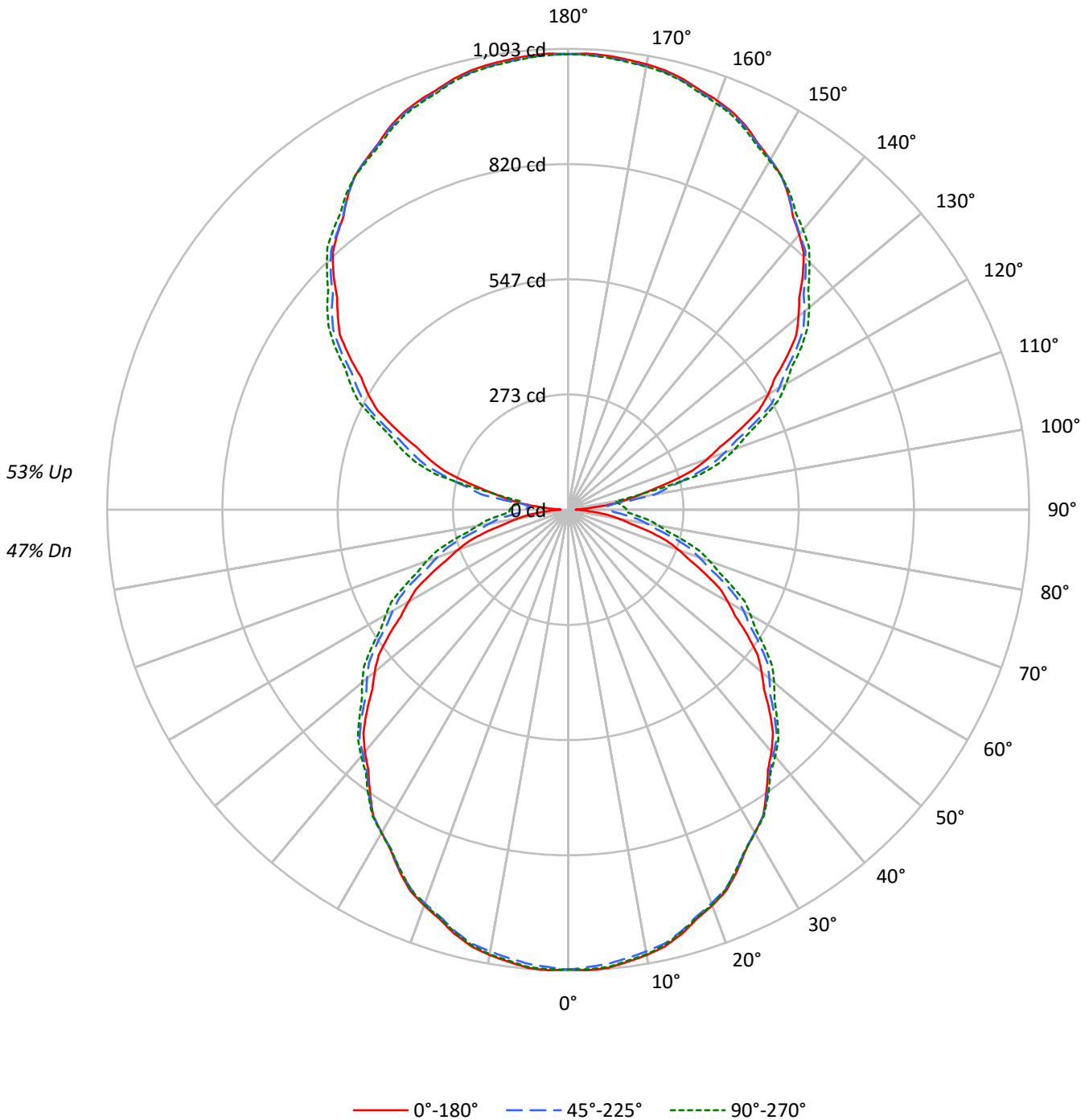
Input Watts (W): 61.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333444-927

CATALOG NUMBER: S125DIW-S1090D1050U927-4F0-1E-UDD-D

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	47
1	96	92	88	84	88	85	81	78	71	68	66	58	56	55	46	45	44	38
2	88	80	73	68	80	73	68	63	62	57	54	51	48	45	40	38	36	32
3	80	70	62	56	73	64	58	52	54	49	45	44	41	38	36	33	31	26
4	73	62	54	47	67	57	50	44	48	42	38	39	35	32	32	29	26	23
5	67	55	47	40	61	51	43	38	43	37	33	35	31	28	28	25	23	19
6	61	49	41	35	56	45	38	33	38	33	28	32	27	24	26	22	20	17
7	57	44	36	31	52	41	34	29	35	29	25	29	25	21	23	20	18	15
8	53	40	32	27	48	37	30	25	32	26	22	26	22	19	22	18	16	13
9	49	37	29	24	45	34	27	23	29	24	20	24	20	17	20	17	14	12
10	46	34	26	21	42	31	25	20	27	21	18	22	18	15	18	15	13	11

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



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CATALOG NUMBER: S125DIW-S1090D1050U927-4F0-1E-UDD-D

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.1	1.5
10°-20°	292.8	4.4
20°-30°	435.5	6.5
30°-40°	515.8	7.7
40°-50°	533.3	8.0
50°-60°	491.3	7.3
60°-70°	397.1	5.9
70°-80°	265.9	4.0
80°-90°	140.2	2.1
90°-100°	116.7	1.7
100°-110°	299.1	4.5
110°-120°	477.2	7.1
120°-130°	585.1	8.7
130°-140°	615.5	9.2
140°-150°	570.7	8.5
150°-160°	460.2	6.9
160°-170°	297.6	4.4
170°-180°	102.6	1.5
0°-30°	831.4	12.4
0°-40°	1347.2	20.1
0°-60°	2371.8	35.4
0°-90°	3175.0	47.4
90°-120°	893.0	13.3
90°-150°	2664.4	39.8
90°-180°	3525.0	52.6
0°-180°	6699.8	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	59	100	128	139	13
95°	60	84	91	117	126	69
105°	245	266	298	318	326	260
115°	449	461	489	504	506	445
125°	633	639	659	672	676	565
135°	786	790	796	808	809	606
145°	910	911	911	917	917	569
155°	1002	997	998	1000	994	461
165°	1057	1052	1053	1057	1051	298
175°	1081	1076	1077	1082	1076	103
180°	1081	1081	1081	1081	1081	



TEST NUMBER: P333444-927

CATALOG NUMBER: S125DIW-S1090D1050U927-4F0-1E-UDD-D

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°	33.5	41.4	49.3	57.2	65.1	73.2	81.5	89.8	98.2	106.5	112.2
90°	17.9	26.9	36.0	45.0	54.0	63.2	72.6	81.8	91.2	100.5	106.9
92.5°	27.7	33.7	39.8	45.9	51.9	59.6	69.0	78.3	87.7	97.1	103.2
95°	59.6	65.2	70.8	76.5	82.1	85.6	87.0	88.2	89.6	90.9	97.0
97.5°	108.0	114.5	121.0	127.5	134.0	134.5	128.9	123.3	117.7	112.2	112.1
100°	145.5	151.1	156.6	162.2	167.6	174.6	182.9	191.2	199.6	207.9	186.3
102.5°	183.8	189.1	194.4	199.6	204.9	211.5	219.4	227.2	235.0	242.9	242.6
105°	245.2	249.7	254.2	258.7	263.2	269.0	276.2	283.3	290.4	297.5	302.3
107.5°	309.0	312.2	315.4	318.6	321.9	327.1	334.3	341.5	348.7	355.9	360.6
110°	350.4	353.2	356.1	358.9	361.8	366.7	373.8	380.7	387.8	394.7	398.8



TEST NUMBER: P333444-927

CATALOG NUMBER: S125DIW-S1090D1050U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	390.1	392.8	395.5	398.2	401.0	405.7	412.3	419.0	425.7	432.4	436.0
115°	448.7	451.2	453.8	456.3	458.9	463.3	469.7	476.0	482.4	488.8	492.3
117.5°	509.3	510.3	511.4	512.5	513.5	517.3	523.9	530.4	536.9	543.4	546.5
120°	547.7	548.3	548.8	549.4	549.9	553.2	559.1	565.1	571.2	577.2	580.8
122.5°	580.9	581.9	582.9	583.9	584.9	588.2	593.7	599.2	604.8	610.3	613.8
125°	633.2	634.2	635.3	636.2	637.2	640.2	644.9	649.7	654.4	659.2	662.3
127.5°	682.3	682.9	683.6	684.3	684.9	687.1	690.9	694.7	698.5	702.3	705.4
130°	713.0	713.7	714.4	715.0	715.7	717.7	721.3	724.8	728.3	731.7	734.6
132.5°	743.0	743.9	745.0	745.9	746.9	748.5	750.7	752.8	755.0	757.2	760.4
135°	786.5	787.3	788.1	789.0	789.8	790.9	792.2	793.5	794.8	796.1	798.8
137.5°	826.5	827.3	828.0	828.7	829.4	830.0	830.5	831.1	831.6	832.0	834.9
140°	851.9	852.3	852.6	853.0	853.3	853.6	853.7	853.7	853.7	853.8	856.7
142.5°	875.7	875.7	875.7	875.8	875.8	875.9	876.2	876.5	876.8	877.1	879.4
145°	910.5	910.5	910.7	910.8	910.9	910.9	910.9	910.9	910.9	910.9	912.4
147.5°	939.8	939.8	939.7	939.6	939.5	939.6	939.8	940.0	940.2	940.4	941.0
150°	959.0	958.7	958.3	958.0	957.6	957.6	958.0	958.3	958.7	959.0	959.4
152.5°	977.6	976.8	976.0	975.3	974.5	974.3	974.6	975.0	975.3	975.7	976.0
155°	1001.5	1000.4	999.3	998.3	997.2	996.9	997.2	997.6	997.9	998.3	998.8
157.5°	1019.9	1019.3	1018.7	1018.0	1017.3	1017.1	1017.1	1017.1	1017.2	1017.2	1017.8
160°	1032.8	1031.7	1030.6	1029.5	1028.5	1028.0	1028.2	1028.4	1028.6	1028.7	1029.4
162.5°	1043.0	1042.0	1040.8	1039.8	1038.7	1038.2	1038.5	1038.6	1038.8	1038.9	1040.0
165°	1056.8	1055.7	1054.6	1053.6	1052.5	1052.0	1052.3	1052.4	1052.6	1052.7	1053.8
167.5°	1067.0	1066.0	1064.9	1063.7	1062.6	1062.2	1062.3	1062.5	1062.7	1062.9	1064.1
170°	1072.8	1071.6	1070.3	1069.1	1067.8	1067.3	1067.5	1067.6	1067.8	1068.0	1069.4
172.5°	1076.7	1075.4	1074.1	1072.9	1071.7	1071.2	1071.5	1071.8	1072.1	1072.5	1073.7
175°	1080.8	1079.7	1078.6	1077.6	1076.5	1076.1	1076.3	1076.4	1076.7	1076.8	1078.2
177.5°	1082.8	1081.9	1081.0	1080.1	1079.3	1079.0	1079.1	1079.3	1079.3	1079.5	1080.5
180°	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8



TEST NUMBER: P333444-927

CATALOG NUMBER: S125DIW-S1090D1050U927-4F0-1E-UDD-D

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°	117.8	123.4	129.1	132.8	134.6	136.3	138.1	139.9
90°	113.2	119.5	126.0	130.2	132.4	134.6	136.8	139.0
92.5°	109.4	115.6	121.8	125.8	127.7	129.6	131.5	133.5
95°	103.1	109.2	115.3	119.2	120.9	122.6	124.2	125.9
97.5°	112.1	112.0	112.0	112.8	114.4	116.1	117.6	119.3
100°	164.8	143.2	121.7	111.3	112.0	112.7	113.4	114.2
102.5°	242.4	242.2	242.0	236.5	225.9	215.2	204.5	193.8
105°	307.0	311.8	316.6	319.7	321.2	322.7	324.2	325.7
107.5°	365.4	370.1	374.9	377.7	378.7	379.6	380.5	381.4
110°	402.7	406.7	410.7	413.6	415.4	417.3	419.1	421.0



TEST NUMBER: P333444-927

CATALOG NUMBER: S125DIW-S1090D1050U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	439.7	443.3	446.9	449.5	450.9	452.3	453.8	455.2
115°	495.9	499.5	503.0	505.0	505.3	505.7	506.0	506.4
117.5°	549.6	552.8	555.9	558.0	559.1	560.3	561.4	562.6
120°	584.6	588.2	591.9	594.0	594.5	595.1	595.6	596.1
122.5°	617.3	620.8	624.2	626.2	626.6	627.0	627.4	627.8
125°	665.4	668.4	671.5	673.4	674.0	674.7	675.3	676.0
127.5°	708.5	711.7	714.8	716.4	716.4	716.5	716.6	716.6
130°	737.4	740.1	742.9	744.5	744.8	745.0	745.4	745.7
132.5°	763.7	766.8	770.1	771.7	771.8	772.0	772.1	772.1
135°	801.6	804.3	807.1	808.5	808.6	808.7	808.8	809.0
137.5°	837.7	840.7	843.5	844.9	845.0	845.0	845.0	845.1
140°	859.8	862.7	865.7	867.1	867.0	866.9	866.7	866.6
142.5°	881.7	884.0	886.3	887.4	887.3	887.2	887.1	886.9
145°	913.7	915.0	916.4	917.0	917.0	916.8	916.7	916.6
147.5°	941.6	942.2	942.8	942.7	941.8	941.0	940.1	939.3
150°	959.7	960.1	960.4	960.0	958.9	957.7	956.5	955.3
152.5°	976.4	976.8	977.1	976.7	975.4	974.2	973.0	971.8
155°	999.3	999.9	1000.4	1000.0	998.5	997.1	995.7	994.3
157.5°	1018.4	1018.9	1019.5	1019.1	1017.6	1016.2	1014.8	1013.4
160°	1030.2	1030.9	1031.6	1031.2	1029.8	1028.4	1027.0	1025.6
162.5°	1041.0	1042.0	1043.0	1042.7	1041.1	1039.6	1038.0	1036.4
165°	1054.9	1056.0	1057.0	1056.9	1055.4	1054.0	1052.6	1051.1
167.5°	1065.4	1066.7	1068.0	1067.9	1066.2	1064.6	1063.0	1061.4
170°	1070.9	1072.3	1073.7	1073.6	1072.0	1070.4	1068.8	1067.1
172.5°	1075.1	1076.3	1077.6	1077.4	1075.9	1074.2	1072.6	1071.0
175°	1079.7	1081.1	1082.5	1082.4	1080.8	1079.2	1077.6	1076.0
177.5°	1081.5	1082.5	1083.5	1083.5	1082.3	1081.2	1080.1	1078.9
180°	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8	1080.8

(END OF REPORT)