

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: P333290-935

Luminaire Tested: **S125DIP-S1090D1205U935-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333290-935
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-S1090D1205U935-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7262.4 lumens
Efficiency: N/A
Efficacy: 111.0 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

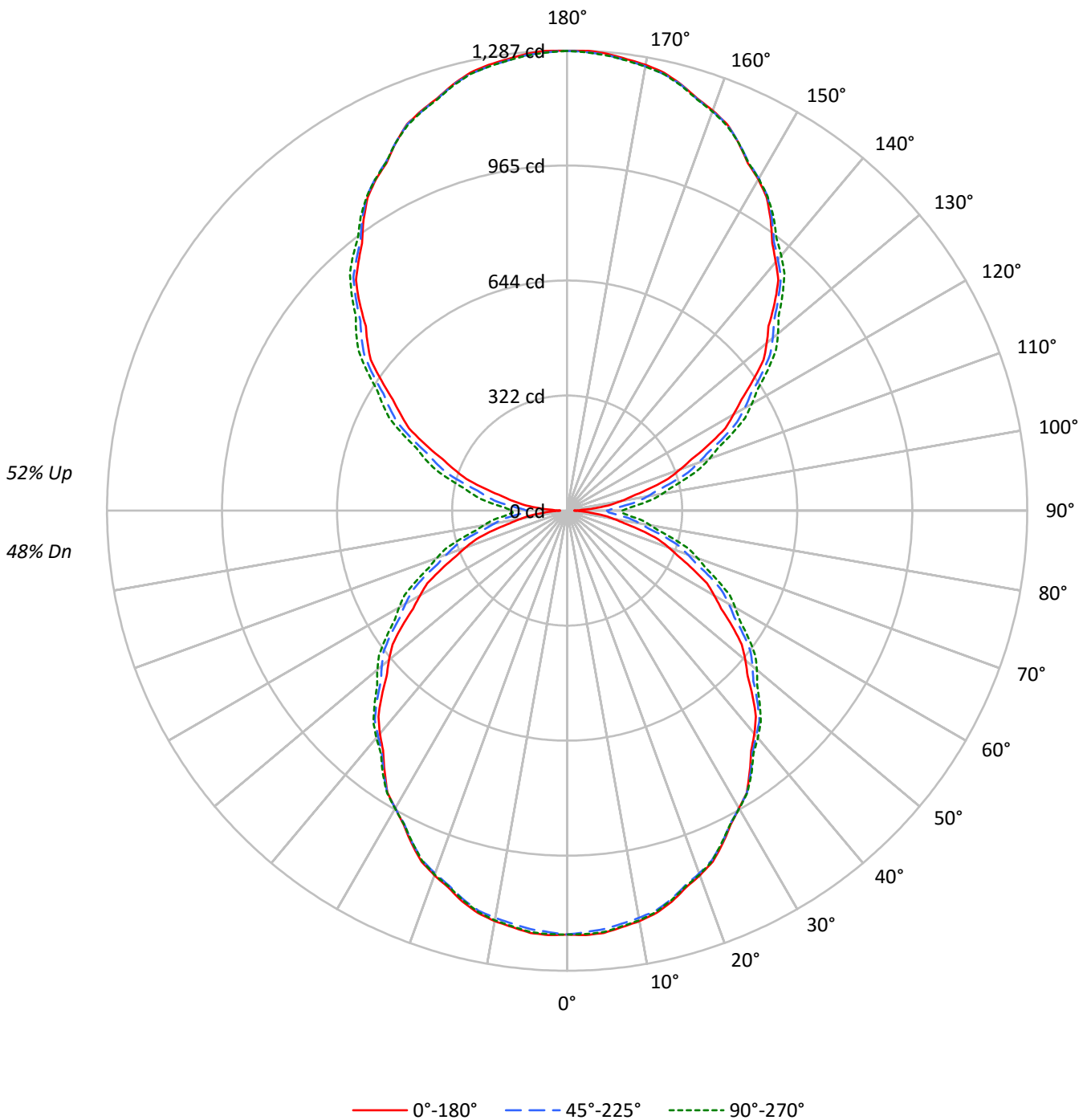
Input Watts (W): 65.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333290-935

CATALOG NUMBER: S125DIP-S1090D1205U935-4F0-1E-UDD-D1

Luminous Intensity Polar Plot





TEST NUMBER: P333290-935

CATALOG NUMBER: S125DIP-S1090D1205U935-4F0-1E-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	107	107	107	107	98	98	98	98	82	82	82		67	67	67		54	54	54	48
1	97	92	88	84	88	85	81	78	71	68	66		58	56	55		46	45	44	39
2	88	80	73	68	80	73	68	63	62	57	54		51	48	45		40	38	37	32
3	80	70	62	56	73	64	58	52	54	49	45		45	41	38		36	33	31	27
4	73	62	54	47	67	57	50	44	48	42	38		40	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	28	24		26	23	20	17
7	57	44	36	31	52	41	34	29	35	29	25		29	25	21		24	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°	7657	7657	7657
5°	7672	7516	7539
10°	7617	7381	7370
15°	7527	7221	7155
20°	7405	7022	6940
25°	7259	6810	6675
30°	7083	6575	6434
35°	6919	6361	6214
40°	6751	6134	5991
45°	6562	5941	5794
50°	6381	5731	5621
55°	6164	5532	5416
60°	5927	5306	5207
65°	5679	5069	4972
70°	5397	4745	4731
75°	4952	4435	4434
80°	4367	4057	4111
85°	3824	3802	4009



TEST NUMBER: P333290-935

CATALOG NUMBER: S125DIP-S1090D1205U935-4F0-1E-UDD-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.1	1.5
10°-20°	318.2	4.4
20°-30°	473.3	6.5
30°-40°	560.6	7.7
40°-50°	579.6	8.0
50°-60°	533.9	7.4
60°-70°	431.6	5.9
70°-80°	289.0	4.0
80°-90°	152.7	2.1
90°-100°	170.2	2.3
100°-110°	316.3	4.4
110°-120°	472.3	6.5
120°-130°	590.4	8.1
130°-140°	645.5	8.9
140°-150°	624.6	8.6
150°-160°	522.9	7.2
160°-170°	347.5	4.8
170°-180°	121.6	1.7
0°-30°	903.6	12.4
0°-40°	1464.2	20.2
0°-60°	2577.8	35.5
0°-90°	3451.2	47.5
90°-120°	958.8	13.2
90°-150°	2819.3	38.8
90°-180°	3811.0	52.5
0°-180°	7262.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1186	1186	1186	1186	1186	
5°	1186	1183	1175	1184	1183	112
15°	1132	1133	1125	1132	1128	319
25°	1029	1032	1025	1029	1024	473
35°	890	898	895	898	898	557
45°	733	746	752	760	761	566
55°	564	582	601	613	618	504
65°	388	415	443	460	465	385
75°	214	244	281	304	310	227
85°	64	102	143	168	178	68
90°	20	65	111	142	154	16
95°	80	113	162	193	205	81
105°	239	263	303	331	344	255
115°	438	451	483	502	508	433
125°	634	640	663	679	684	567
135°	821	826	835	849	852	632
145°	993	996	998	1004	1006	620
155°	1135	1135	1136	1139	1135	522
165°	1234	1232	1233	1236	1231	348
175°	1283	1279	1279	1284	1278	122
180°	1286	1286	1286	1286	1286	



TEST NUMBER: P333290-935

CATALOG NUMBER: S125DIP-S1090D1205U935-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6
2.5°	1188.4	1187.9	1187.5	1187.1	1186.7	1185.8	1184.3	1182.8	1181.5	1180.0	1181.5
5°	1185.6	1185.1	1184.6	1184.0	1183.5	1182.3	1180.5	1178.7	1176.9	1175.1	1177.2
7.5°	1175.1	1174.9	1174.7	1174.5	1174.3	1173.3	1171.4	1169.5	1167.7	1165.8	1167.6
10°	1165.8	1165.8	1165.8	1165.8	1165.8	1164.8	1162.7	1160.6	1158.6	1156.5	1158.3
12.5°	1152.8	1153.0	1153.2	1153.4	1153.7	1152.9	1151.2	1149.6	1148.0	1146.2	1147.7
15°	1132.1	1132.4	1132.6	1132.9	1133.2	1132.4	1130.6	1128.8	1127.0	1125.2	1126.7
17.5°	1105.1	1105.6	1106.1	1106.6	1107.2	1106.6	1104.7	1102.9	1101.1	1099.3	1100.5
20°	1085.6	1086.2	1086.7	1087.2	1087.7	1087.0	1085.2	1083.4	1081.6	1079.8	1080.6
22.5°	1063.2	1064.2	1065.1	1066.1	1067.0	1066.4	1064.5	1062.5	1060.4	1058.4	1059.4
25°	1028.6	1029.4	1030.2	1031.0	1031.7	1031.4	1029.8	1028.3	1026.7	1025.2	1026.2
27.5°	990.1	991.2	992.3	993.5	994.6	994.3	992.6	990.8	989.0	987.3	988.0
30°	961.2	962.8	964.3	965.9	967.4	967.4	965.9	964.3	962.8	961.2	961.7
32.5°	935.2	936.5	937.9	939.3	940.6	940.6	939.5	938.4	937.3	936.2	936.7
35°	890.4	892.2	894.0	895.8	897.6	898.1	897.3	896.6	895.8	895.0	895.8
37.5°	845.5	847.1	848.8	850.4	852.0	852.8	852.6	852.3	852.0	851.8	852.8
40°	814.8	816.8	818.9	821.0	823.0	824.0	823.7	823.5	823.2	822.9	824.0
42.5°	781.3	784.0	786.7	789.4	792.0	793.7	794.3	794.8	795.4	796.0	797.2
45°	733.4	736.2	739.1	741.9	744.8	746.8	748.1	749.4	750.7	752.0	753.8
47.5°	684.4	687.0	689.7	692.2	694.9	697.3	699.6	701.8	704.0	706.2	708.9
50°	650.9	653.8	656.6	659.4	662.3	665.1	668.0	670.8	673.6	676.5	679.3
52.5°	615.5	619.1	622.5	625.9	629.4	632.8	636.4	639.8	643.3	646.7	649.8
55°	563.7	567.8	572.0	576.1	580.2	584.4	588.5	592.6	596.8	600.9	603.7
57.5°	510.7	515.7	520.6	525.6	530.5	535.5	540.2	544.9	549.7	554.4	557.7
60°	475.4	480.5	485.7	490.9	496.0	501.2	506.4	511.5	516.7	521.9	525.7
62.5°	441.0	446.2	451.3	456.5	461.7	467.0	472.6	478.2	483.8	489.3	493.6
65°	388.2	394.2	400.1	406.0	412.0	418.0	424.2	430.4	436.6	442.8	446.7
67.5°	338.5	344.2	349.9	355.7	361.4	367.4	373.8	380.0	386.3	392.6	397.4
70°	302.2	308.2	314.1	320.0	326.0	332.3	339.0	345.7	352.4	359.1	364.0
72.5°	266.9	273.0	279.1	285.3	291.4	298.2	305.6	312.9	320.2	327.5	332.9
75°	213.9	220.6	227.3	234.0	240.7	248.2	256.5	264.8	273.0	281.3	286.5
77.5°	163.0	170.7	178.5	186.2	194.0	201.8	209.7	217.7	225.7	233.6	239.3
80°	131.3	139.1	146.8	154.5	162.3	170.6	179.3	188.1	196.9	205.7	211.4
82.5°	102.5	110.6	118.8	127.0	135.2	143.7	152.7	161.7	170.7	179.7	185.2
85°	63.9	72.4	80.9	89.5	98.0	106.8	115.8	124.8	133.9	142.9	148.6
87.5°	36.5	45.1	53.7	62.3	70.9	79.8	88.9	98.0	107.1	116.1	122.3
90°	19.6	29.6	39.7	49.8	59.8	70.0	80.3	90.7	101.0	111.3	118.4
92.5°	41.0	49.9	58.7	67.6	76.5	86.4	97.3	108.2	119.1	130.0	137.2
95°	80.2	87.3	94.5	101.6	108.7	117.9	128.9	139.9	150.8	161.9	169.1
97.5°	121.7	128.0	134.2	140.4	146.6	155.6	167.1	178.7	190.2	201.7	208.6
100°	152.8	158.3	163.7	169.1	174.5	182.9	194.0	205.2	216.3	227.5	234.9
102.5°	186.3	192.3	198.1	204.1	209.9	217.7	227.2	236.7	246.2	255.8	263.1
105°	238.6	243.8	249.1	254.3	259.6	266.7	275.8	284.9	293.9	303.1	309.5
107.5°	296.4	301.0	305.7	310.3	315.0	321.5	329.9	338.4	346.8	355.3	361.1
110°	336.3	340.5	344.7	349.0	353.2	359.2	367.1	375.0	382.9	390.8	396.4



TEST NUMBER: P333290-935

CATALOG NUMBER: S125DIP-S1090D1205U935-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	377.9	381.0	384.0	387.1	390.1	395.6	403.5	411.4	419.2	427.1	432.1
115°	438.2	440.9	443.6	446.3	449.0	453.9	461.1	468.2	475.4	482.6	487.0
117.5°	498.7	500.2	501.9	503.4	505.1	509.2	515.9	522.7	529.4	536.2	540.8
120°	537.1	539.0	540.9	542.8	544.7	548.6	554.8	561.0	567.1	573.3	577.7
122.5°	577.8	578.5	579.3	580.1	580.8	584.4	590.6	597.0	603.3	609.6	613.6
125°	634.0	635.1	636.1	637.2	638.3	641.5	646.9	652.3	657.7	663.1	666.8
127.5°	692.8	693.4	693.9	694.3	694.8	697.3	701.8	706.4	710.8	715.3	718.9
130°	728.8	729.7	730.6	731.4	732.3	734.8	738.8	742.9	746.9	751.0	754.4
132.5°	764.0	765.7	767.5	769.3	771.0	773.3	776.0	778.7	781.4	784.1	787.5
135°	820.8	821.8	822.9	824.0	825.1	826.6	828.6	830.7	832.7	834.7	838.1
137.5°	874.2	875.2	876.3	877.4	878.5	879.7	881.1	882.4	883.8	885.2	888.5
140°	907.7	908.8	909.8	910.9	912.1	913.1	914.0	915.0	915.8	916.8	920.1
142.5°	942.0	942.8	943.5	944.3	944.9	945.8	946.7	947.5	948.5	949.3	952.1
145°	992.6	993.3	993.9	994.5	995.2	995.8	996.5	997.2	997.8	998.5	999.8
147.5°	1038.4	1038.8	1039.3	1039.8	1040.3	1040.8	1041.4	1041.9	1042.4	1042.9	1043.9
150°	1069.5	1069.4	1069.1	1068.9	1068.7	1069.0	1069.9	1070.7	1071.7	1072.5	1072.5
152.5°	1095.2	1095.5	1095.8	1096.1	1096.4	1096.7	1097.1	1097.4	1097.9	1098.2	1098.7
155°	1134.6	1134.6	1134.6	1134.6	1134.6	1134.7	1135.0	1135.1	1135.4	1135.6	1136.5
157.5°	1169.8	1169.3	1168.8	1168.4	1167.9	1167.7	1167.9	1168.2	1168.4	1168.6	1169.5
160°	1190.6	1190.0	1189.3	1188.6	1187.9	1187.7	1187.9	1188.2	1188.4	1188.6	1189.5
162.5°	1209.0	1208.6	1208.1	1207.6	1207.0	1206.9	1206.9	1206.9	1206.9	1207.0	1208.1
165°	1233.6	1233.2	1232.8	1232.3	1231.8	1231.7	1232.0	1232.2	1232.4	1232.6	1233.6
167.5°	1254.5	1253.5	1252.7	1251.8	1250.9	1250.4	1250.4	1250.4	1250.4	1250.4	1251.8
170°	1265.7	1264.8	1263.9	1263.0	1262.1	1261.6	1261.6	1261.6	1261.6	1261.6	1263.0
172.5°	1273.7	1272.8	1271.9	1271.0	1270.1	1269.6	1269.6	1269.6	1269.6	1269.6	1271.0
175°	1282.6	1281.8	1280.9	1280.0	1279.1	1278.7	1278.7	1278.7	1278.7	1278.7	1280.0
177.5°	1287.3	1286.6	1285.8	1285.1	1284.4	1284.0	1283.8	1283.7	1283.4	1283.2	1284.4
180°	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6



TEST NUMBER: P333290-935

CATALOG NUMBER: S125DIP-S1090D1205U935-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6	1185.6
2.5°	1182.8	1184.3	1185.8	1186.4	1186.2	1185.9	1185.8	1185.6
5°	1179.2	1181.3	1183.4	1184.3	1184.0	1183.8	1183.5	1183.3
7.5°	1169.4	1171.2	1173.0	1173.8	1173.5	1173.3	1173.0	1172.8
10°	1160.1	1161.9	1163.7	1164.5	1164.2	1164.0	1163.7	1163.5
12.5°	1149.1	1150.5	1151.8	1152.2	1151.6	1150.9	1150.2	1149.5
15°	1128.3	1129.8	1131.4	1131.6	1130.6	1129.5	1128.5	1127.5
17.5°	1101.7	1102.9	1104.1	1104.3	1103.7	1103.1	1102.5	1101.9
20°	1081.3	1082.1	1082.9	1083.3	1083.3	1083.3	1083.3	1083.3
22.5°	1060.4	1061.4	1062.3	1062.5	1061.9	1061.3	1060.7	1060.1
25°	1027.3	1028.3	1029.3	1029.2	1027.9	1026.6	1025.3	1024.0
27.5°	988.7	989.5	990.2	990.3	989.8	989.4	988.9	988.4
30°	962.3	962.8	963.3	963.5	963.2	962.9	962.7	962.4
32.5°	937.2	937.7	938.2	938.3	938.1	937.8	937.5	937.3
35°	896.6	897.3	898.1	898.5	898.5	898.5	898.5	898.5
37.5°	853.9	854.9	855.9	856.4	856.3	856.2	856.0	855.9
40°	825.0	826.0	827.1	827.9	828.4	828.9	829.4	829.9
42.5°	798.4	799.7	800.9	801.6	801.7	801.8	801.9	802.0
45°	755.6	757.4	759.2	760.3	760.5	760.8	761.0	761.3
47.5°	711.5	714.1	716.8	718.3	718.9	719.5	720.1	720.7
50°	682.2	685.0	687.9	689.7	690.4	691.2	692.0	692.8
52.5°	652.8	655.8	658.9	660.7	661.2	661.9	662.5	663.0
55°	606.6	609.4	612.3	614.2	615.3	616.3	617.3	618.4
57.5°	560.9	564.2	567.5	569.5	570.2	571.0	571.8	572.6
60°	529.6	533.5	537.4	539.7	540.4	541.2	542.0	542.8
62.5°	497.9	502.2	506.5	509.1	510.1	511.1	512.0	513.1
65°	450.6	454.4	458.3	460.8	461.8	462.9	463.9	464.9
67.5°	402.0	406.7	411.5	414.5	415.8	417.2	418.4	419.8
70°	368.9	373.8	378.8	382.0	383.6	385.1	386.7	388.2
72.5°	338.2	343.5	348.8	352.1	353.2	354.3	355.4	356.6
75°	291.6	296.8	302.0	305.1	306.4	307.7	309.0	310.3
77.5°	245.0	250.6	256.3	259.7	260.7	261.7	262.8	263.8
80°	217.1	222.7	228.4	231.8	232.8	233.8	234.9	235.9
82.5°	190.6	196.1	201.6	205.3	207.2	209.0	210.9	212.7
85°	154.3	160.0	165.7	169.5	171.6	173.7	175.7	177.8
87.5°	128.5	134.7	140.9	144.9	146.8	148.8	150.7	152.7
90°	125.4	132.5	139.6	144.3	146.8	149.2	151.7	154.2
92.5°	144.4	151.6	158.9	163.6	165.8	168.2	170.5	172.7
95°	176.3	183.6	190.9	195.6	197.9	200.1	202.3	204.6
97.5°	215.5	222.4	229.3	233.8	235.7	237.8	239.8	241.9
100°	242.3	249.8	257.2	261.9	263.9	265.9	267.9	269.8
102.5°	270.5	277.9	285.3	290.2	292.3	294.5	296.6	298.9
105°	316.1	322.5	329.1	333.6	336.0	338.5	341.0	343.5
107.5°	366.9	372.6	378.4	382.1	383.7	385.2	386.8	388.3
110°	401.9	407.5	413.1	416.7	418.3	419.8	421.5	423.0



TEST NUMBER: P333290-935

CATALOG NUMBER: S125DIP-S1090D1205U935-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	437.1	442.1	447.1	450.4	451.8	453.1	454.6	456.0
115°	491.4	495.8	500.2	503.2	504.5	505.8	507.1	508.4
117.5°	545.4	549.9	554.5	557.2	558.1	559.0	559.8	560.7
120°	582.1	586.5	590.9	593.4	594.1	594.7	595.4	596.1
122.5°	617.6	621.6	625.6	628.1	628.9	629.7	630.6	631.5
125°	670.5	674.2	677.8	680.2	681.2	682.3	683.4	684.5
127.5°	722.6	726.2	729.8	732.1	733.1	734.2	735.2	736.3
130°	757.8	761.1	764.6	766.6	767.5	768.4	769.2	770.1
132.5°	790.8	794.3	797.6	799.6	800.0	800.5	801.0	801.4
135°	841.5	844.8	848.2	850.1	850.4	850.8	851.3	851.6
137.5°	891.8	895.1	898.5	900.1	900.0	899.9	899.8	899.7
140°	923.3	926.7	930.0	931.5	931.4	931.4	931.3	931.3
142.5°	954.8	957.4	960.1	961.5	961.4	961.3	961.2	961.1
145°	1001.1	1002.4	1003.7	1004.5	1004.9	1005.2	1005.6	1006.0
147.5°	1044.8	1045.8	1046.7	1046.7	1045.6	1044.6	1043.5	1042.5
150°	1072.5	1072.5	1072.5	1072.5	1072.3	1072.1	1071.9	1071.7
152.5°	1099.2	1099.8	1100.3	1100.2	1099.4	1098.7	1097.9	1097.2
155°	1137.4	1138.2	1139.2	1139.0	1137.9	1136.8	1135.7	1134.6
157.5°	1170.4	1171.3	1172.2	1171.9	1170.4	1169.0	1167.5	1166.1
160°	1190.4	1191.3	1192.1	1192.1	1190.9	1189.8	1188.7	1187.7
162.5°	1209.2	1210.2	1211.3	1211.2	1209.9	1208.6	1207.3	1206.0
165°	1234.4	1235.3	1236.2	1236.0	1234.7	1233.3	1232.0	1230.6
167.5°	1253.1	1254.5	1255.8	1255.8	1254.4	1253.0	1251.6	1250.3
170°	1264.3	1265.7	1267.0	1266.9	1265.3	1263.8	1262.2	1260.7
172.5°	1272.3	1273.7	1275.0	1275.0	1273.6	1272.2	1270.8	1269.5
175°	1281.3	1282.6	1284.0	1283.9	1282.4	1280.8	1279.2	1277.6
177.5°	1285.4	1286.5	1287.5	1287.5	1286.2	1285.0	1283.8	1282.5
180°	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6	1285.6

(END OF REPORT)