

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: P333281-935

Luminaire Tested: **S125DIP-S1090D1035U935-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333281-935
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-S1090D1035U935-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 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: 6756.7 lumens
Efficiency: N/A
Efficacy: 111.7 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

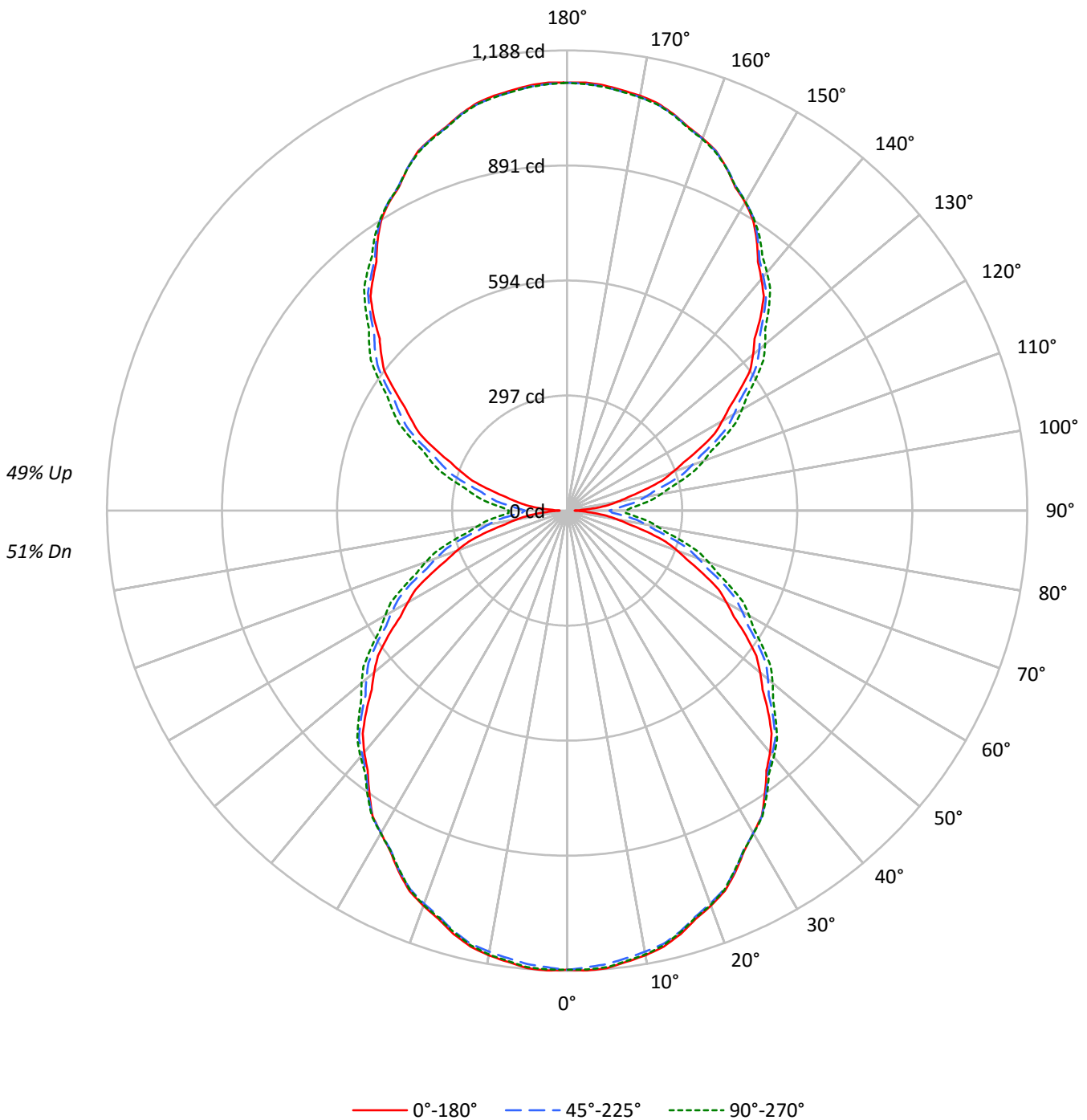
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333281-935

CATALOG NUMBER: S125DIP-S1090D1035U935-4F0-1E-UDD-D1

Luminous Intensity Polar Plot





TEST NUMBER: P333281-935

CATALOG NUMBER: S125DIP-S1090D1035U935-4F0-1E-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	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	97	93	88	85	90	86	82	79	72	70	67	60	58	57	49	48	47	41
2	88	80	74	69	81	74	69	64	63	59	55	53	49	47	43	41	39	34
3	80	70	63	57	74	65	58	53	55	50	46	46	42	39	38	35	33	29
4	73	62	54	48	67	58	50	45	49	43	39	41	37	33	34	31	28	24
5	67	55	47	41	62	51	44	38	44	38	34	37	32	29	30	27	24	21
6	62	50	41	35	57	46	39	33	39	34	29	33	29	25	27	24	21	18
7	57	45	37	31	53	42	34	29	36	30	26	30	26	22	25	21	19	16
8	53	41	33	27	49	38	31	26	32	27	23	28	23	20	23	19	17	14
9	49	37	29	24	46	34	28	23	30	24	20	25	21	18	21	18	15	13
10	46	34	27	22	43	32	25	21	27	22	18	23	19	16	20	16	14	12

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: P333281-935

CATALOG NUMBER: S125DIP-S1090D1035U935-4F0-1E-UDD-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.1	1.7
10°-20°	318.2	4.7
20°-30°	473.3	7.0
30°-40°	560.6	8.3
40°-50°	579.6	8.6
50°-60°	533.9	7.9
60°-70°	431.6	6.4
70°-80°	289.0	4.3
80°-90°	152.3	2.3
90°-100°	158.1	2.3
100°-110°	280.5	4.2
110°-120°	411.6	6.1
120°-130°	510.6	7.6
130°-140°	556.0	8.2
140°-150°	536.9	7.9
150°-160°	449.2	6.6
160°-170°	298.6	4.4
170°-180°	104.5	1.5
0°-30°	903.6	13.4
0°-40°	1464.2	21.7
0°-60°	2577.8	38.2
0°-90°	3450.8	51.1
90°-120°	850.2	12.6
90°-150°	2453.6	36.3
90°-180°	3306.0	48.9
0°-180°	6756.7	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	64	109	139	151	15
95°	71	104	151	181	192	71
105°	206	230	269	297	308	220
115°	378	390	421	440	447	373
125°	545	550	573	590	595	488
135°	706	710	718	733	736	544
145°	853	855	858	864	866	533
155°	975	975	976	979	975	449
165°	1060	1058	1059	1062	1057	299
175°	1102	1099	1098	1103	1098	105
180°	1105	1105	1105	1105	1105	



TEST NUMBER: P333281-935

CATALOG NUMBER: S125DIP-S1090D1035U935-4F0-1E-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°	36.4	45.0	53.6	62.2	70.7	79.6	88.6	97.6	106.7	115.7	121.8
90°	19.5	29.3	39.0	48.8	58.6	68.6	78.7	88.9	98.9	109.1	116.0
92.5°	37.5	46.2	54.9	63.7	72.4	82.1	92.7	103.3	114.0	124.6	131.6
95°	70.9	78.1	85.2	92.3	99.4	108.2	119.0	129.7	140.3	151.0	158.1
97.5°	106.6	112.7	118.9	125.1	131.3	140.0	151.1	162.2	173.3	184.4	191.1
100°	133.1	138.5	144.0	149.4	154.8	162.9	173.7	184.4	195.2	205.9	213.0
102.5°	161.8	167.6	173.3	179.1	184.9	192.4	201.7	211.0	220.3	229.7	236.8
105°	206.5	211.5	216.6	221.7	226.8	233.8	242.7	251.6	260.5	269.4	275.7
107.5°	256.0	260.4	264.8	269.3	273.8	280.2	288.5	296.9	305.1	313.5	319.2
110°	290.1	294.1	298.2	302.2	306.3	312.2	320.0	327.9	335.6	343.5	349.0



TEST NUMBER: P333281-935

CATALOG NUMBER: S125DIP-S1090D1035U935-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	325.8	328.8	331.8	334.8	337.8	343.1	350.9	358.6	366.4	374.1	379.1
115°	377.5	380.0	382.6	385.2	387.7	392.6	399.7	406.7	413.9	420.9	425.4
117.5°	429.2	430.8	432.3	433.9	435.4	439.5	446.2	452.9	459.6	466.3	470.8
120°	462.3	464.0	465.7	467.4	469.2	473.1	479.2	485.3	491.5	497.7	502.0
122.5°	497.1	497.7	498.5	499.2	499.9	503.3	509.6	515.8	522.0	528.3	532.4
125°	545.4	546.2	547.1	548.0	548.9	552.0	557.3	562.7	568.1	573.4	577.2
127.5°	595.7	596.2	596.5	596.9	597.3	599.8	604.2	608.6	613.1	617.6	621.2
130°	626.7	627.4	628.1	628.8	629.5	631.8	635.8	639.8	643.8	647.8	651.3
132.5°	656.7	658.2	659.7	661.2	662.8	664.9	667.6	670.3	673.0	675.7	679.2
135°	705.5	706.4	707.2	708.1	709.0	710.5	712.5	714.5	716.4	718.4	721.8
137.5°	751.3	752.2	753.1	754.0	754.9	756.0	757.3	758.6	759.9	761.2	764.5
140°	780.0	780.9	781.9	782.8	783.8	784.6	785.5	786.4	787.1	788.0	791.2
142.5°	809.5	810.1	810.7	811.3	811.9	812.6	813.4	814.2	814.9	815.7	818.4
145°	853.0	853.5	854.0	854.5	855.1	855.6	856.2	856.7	857.3	857.9	859.2
147.5°	892.1	892.5	892.9	893.4	893.7	894.2	894.7	895.1	895.5	896.0	896.9
150°	918.9	918.7	918.5	918.3	918.2	918.4	919.2	920.0	920.7	921.4	921.4
152.5°	940.9	941.2	941.4	941.7	941.9	942.3	942.5	942.9	943.1	943.5	943.9
155°	974.7	974.7	974.7	974.7	974.7	974.8	975.1	975.3	975.4	975.6	976.4
157.5°	1005.0	1004.6	1004.2	1003.8	1003.3	1003.2	1003.4	1003.6	1003.8	1004.0	1004.8
160°	1022.9	1022.4	1021.7	1021.1	1020.6	1020.5	1020.6	1020.8	1021.0	1021.1	1021.9
162.5°	1038.7	1038.3	1037.8	1037.4	1037.1	1036.8	1036.9	1036.9	1037.0	1037.0	1037.9
165°	1059.9	1059.5	1059.1	1058.7	1058.3	1058.3	1058.4	1058.6	1058.8	1059.0	1059.8
167.5°	1077.7	1076.9	1076.2	1075.5	1074.7	1074.3	1074.3	1074.3	1074.3	1074.3	1075.5
170°	1087.4	1086.6	1085.8	1085.1	1084.3	1083.9	1083.9	1083.9	1083.9	1083.9	1085.1
172.5°	1094.2	1093.5	1092.7	1091.9	1091.2	1090.8	1090.8	1090.8	1090.8	1090.8	1091.9
175°	1102.0	1101.2	1100.4	1099.7	1098.9	1098.5	1098.5	1098.5	1098.5	1098.5	1099.7
177.5°	1106.0	1105.4	1104.7	1104.1	1103.5	1103.1	1102.9	1102.8	1102.7	1102.5	1103.5
180°	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6



TEST NUMBER: P333281-935

CATALOG NUMBER: S125DIP-S1090D1035U935-4F0-1E-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°	128.0	134.1	140.3	144.3	146.2	148.1	150.1	152.0
90°	122.9	129.8	136.6	141.3	143.7	146.0	148.4	150.8
92.5°	138.6	145.6	152.6	157.2	159.5	161.6	163.8	166.1
95°	165.1	172.1	179.1	183.7	185.9	188.1	190.3	192.5
97.5°	197.8	204.5	211.2	215.5	217.5	219.5	221.4	223.4
100°	220.2	227.3	234.5	239.0	240.9	242.9	244.8	246.8
102.5°	243.8	251.0	258.0	262.6	264.8	266.8	268.9	271.0
105°	282.0	288.3	294.6	298.9	301.4	303.8	306.1	308.5
107.5°	324.9	330.5	336.2	339.8	341.4	342.9	344.6	346.1
110°	354.4	359.9	365.4	368.9	370.6	372.1	373.8	375.4



TEST NUMBER: P333281-935

CATALOG NUMBER: S125DIP-S1090D1035U935-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	384.0	389.0	394.0	397.2	398.6	400.1	401.6	403.0
115°	429.9	434.4	438.8	441.7	443.1	444.4	445.8	447.1
117.5°	475.4	479.9	484.5	487.2	488.2	489.2	490.2	491.2
120°	506.4	510.8	515.2	517.8	518.6	519.4	520.1	520.9
122.5°	536.3	540.4	544.4	546.9	547.9	548.8	549.7	550.7
125°	580.9	584.7	588.4	590.8	591.9	593.1	594.2	595.3
127.5°	624.8	628.5	632.1	634.5	635.6	636.7	637.8	638.9
130°	654.6	658.1	661.5	663.7	664.6	665.5	666.4	667.3
132.5°	682.6	686.0	689.4	691.4	692.0	692.5	693.0	693.6
135°	725.1	728.5	731.8	733.8	734.3	734.9	735.4	735.9
137.5°	767.8	771.0	774.3	776.0	776.1	776.1	776.2	776.3
140°	794.4	797.6	800.9	802.5	802.6	802.7	802.8	802.8
142.5°	821.0	823.6	826.3	827.7	827.8	827.9	827.9	828.0
145°	860.5	861.8	863.1	863.9	864.4	864.8	865.3	865.7
147.5°	897.8	898.6	899.5	899.6	898.7	897.9	897.0	896.2
150°	921.4	921.4	921.4	921.4	921.3	921.2	921.0	920.9
152.5°	944.4	944.9	945.3	945.2	944.6	943.9	943.3	942.7
155°	977.1	977.9	978.7	978.6	977.7	976.6	975.7	974.7
157.5°	1005.5	1006.3	1007.0	1006.8	1005.6	1004.3	1003.0	1001.8
160°	1022.7	1023.5	1024.2	1024.2	1023.2	1022.3	1021.3	1020.3
162.5°	1038.8	1039.7	1040.7	1040.6	1039.5	1038.4	1037.2	1036.1
165°	1060.5	1061.3	1062.0	1061.9	1060.8	1059.5	1058.4	1057.3
167.5°	1076.6	1077.7	1078.9	1078.8	1077.7	1076.5	1075.3	1074.1
170°	1086.2	1087.4	1088.5	1088.4	1087.1	1085.7	1084.4	1083.1
172.5°	1093.1	1094.2	1095.4	1095.4	1094.2	1093.0	1091.8	1090.6
175°	1100.9	1102.0	1103.1	1103.0	1101.7	1100.4	1099.0	1097.7
177.5°	1104.3	1105.3	1106.1	1106.1	1105.0	1104.0	1102.9	1101.8
180°	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6

(END OF REPORT)