

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: P333289-927

Luminaire Tested: **S125DIP-S1090D1205U927-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333289-927
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: S125DIP-S1090D1205U927-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 7195.0 lumens
Efficiency: N/A
Efficacy: 110.0 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

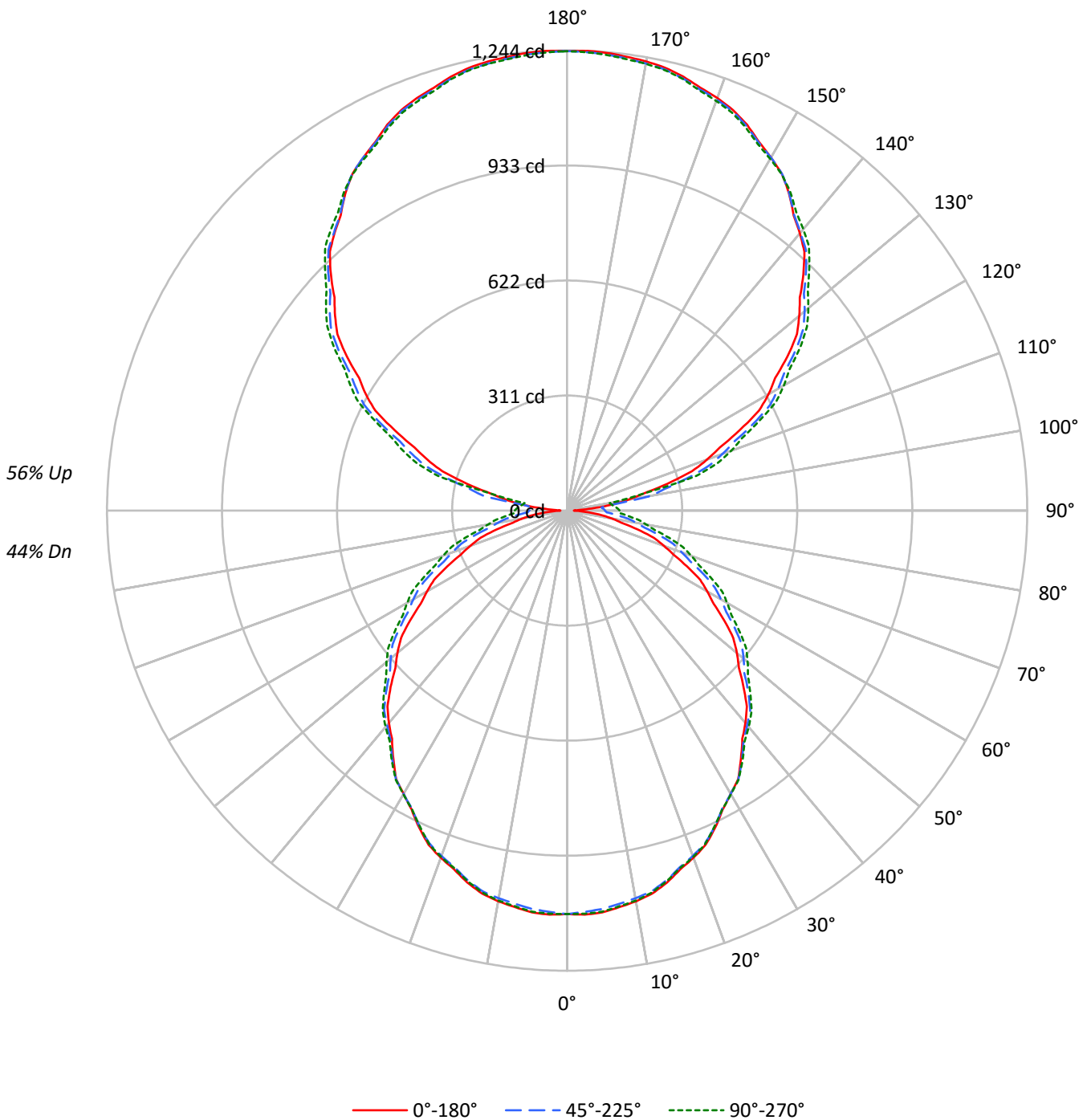
Input Watts (W): 65.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333289-927

CATALOG NUMBER: S125DIP-S1090D1205U927-4F0-1E-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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	44
1	96	91	87	83	87	84	80	77	69	67	64	56	54	53	44	43	42	36
2	87	79	73	68	79	73	67	63	60	56	53	49	46	43	38	36	34	29
3	79	69	62	56	72	64	57	52	53	48	44	43	39	36	34	31	29	25
4	72	61	53	47	66	56	49	44	47	42	37	38	34	31	30	27	25	21
5	66	54	46	40	60	50	43	37	42	36	32	34	30	27	27	24	22	18
6	61	49	41	35	55	45	38	32	38	32	28	31	26	23	24	21	19	16
7	56	44	36	30	51	41	33	28	34	28	24	28	24	21	22	19	17	14
8	52	40	32	27	48	37	30	25	31	25	22	25	21	18	20	17	15	12
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	19	16	13	11
10	45	33	26	21	41	31	24	20	26	21	17	22	18	15	17	14	12	10

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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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	103.1	1.4
10°-20°	292.8	4.1
20°-30°	435.5	6.1
30°-40°	515.8	7.2
40°-50°	533.3	7.4
50°-60°	491.3	6.8
60°-70°	397.1	5.5
70°-80°	265.9	3.7
80°-90°	140.5	2.0
90°-100°	122.5	1.7
100°-110°	335.2	4.7
110°-120°	542.7	7.5
120°-130°	669.1	9.3
130°-140°	705.9	9.8
140°-150°	655.6	9.1
150°-160°	528.8	7.3
160°-170°	342.0	4.8
170°-180°	117.9	1.6
0°-30°	831.4	11.6
0°-40°	1347.2	18.7
0°-60°	2371.8	33.0
0°-90°	3175.3	44.1
90°-120°	1000.5	13.9
90°-150°	3031.0	42.1
90°-180°	4020.0	55.9
0°-180°	7195.0	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	60	102	131	142	14
95°	66	90	93	120	128	78
105°	280	302	333	354	361	297
115°	515	528	555	570	572	510
125°	727	733	754	767	770	649
135°	904	908	914	925	925	696
145°	1046	1047	1047	1053	1052	654
155°	1151	1146	1147	1149	1143	530
165°	1214	1209	1210	1215	1208	343
175°	1242	1237	1237	1244	1236	118
180°	1242	1242	1242	1242	1242	



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CATALOG NUMBER: S125DIP-S1090D1205U927-4F0-1E-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°	33.6	41.5	49.4	57.4	65.3	73.4	81.8	90.2	98.5	106.9	112.6
90°	18.1	27.3	36.5	45.8	55.0	64.4	73.9	83.4	92.9	102.4	108.9
92.5°	29.5	35.5	41.4	47.2	53.2	60.8	70.3	79.9	89.4	99.0	105.3
95°	66.4	71.9	77.5	83.1	88.6	91.6	91.9	92.2	92.5	92.8	99.0
97.5°	122.2	128.8	135.5	142.2	148.9	148.4	140.8	133.2	125.6	118.0	117.2
100°	165.5	171.1	176.7	182.4	187.9	195.0	203.4	211.8	220.2	228.6	203.1
102.5°	209.6	215.0	220.4	225.8	231.2	237.8	245.7	253.6	261.5	269.4	268.5
105°	280.3	284.9	289.5	294.1	298.8	304.7	311.8	318.9	326.1	333.2	337.9
107.5°	353.8	357.0	360.2	363.5	366.7	371.9	379.2	386.4	393.7	400.9	405.7
110°	401.6	404.4	407.3	410.1	413.0	417.9	424.9	432.1	439.1	446.2	450.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	447.2	450.0	452.7	455.5	458.3	463.0	469.8	476.4	483.2	489.9	493.4
115°	514.6	517.3	520.0	522.7	525.4	529.9	536.3	542.6	549.1	555.4	558.9
117.5°	584.5	585.5	586.5	587.6	588.7	592.5	599.1	605.7	612.4	619.0	621.9
120°	628.6	629.2	629.6	630.2	630.7	634.0	640.0	646.1	652.2	658.3	661.9
122.5°	666.8	667.9	669.0	670.1	671.2	674.6	680.2	685.7	691.3	696.8	700.3
125°	727.0	728.2	729.4	730.6	731.7	734.7	739.5	744.3	749.0	753.8	756.8
127.5°	783.5	784.3	785.1	785.9	786.7	789.0	792.7	796.5	800.3	804.1	807.2
130°	818.9	819.7	820.5	821.3	822.0	824.2	827.8	831.2	834.8	838.4	841.1
132.5°	853.4	854.5	855.7	856.8	857.9	859.6	861.7	863.8	865.9	868.1	871.2
135°	903.5	904.4	905.5	906.4	907.4	908.6	909.8	911.1	912.3	913.5	916.2
137.5°	949.4	950.4	951.3	952.1	953.0	953.6	954.0	954.5	955.0	955.4	958.3
140°	978.8	979.2	979.6	980.0	980.5	980.6	980.7	980.7	980.8	980.8	983.8
142.5°	1006.1	1006.2	1006.2	1006.2	1006.3	1006.5	1006.8	1007.2	1007.5	1007.8	1010.1
145°	1046.0	1046.2	1046.4	1046.6	1046.7	1046.8	1046.8	1046.8	1046.8	1046.8	1048.2
147.5°	1079.9	1079.8	1079.7	1079.7	1079.6	1079.7	1079.9	1080.1	1080.5	1080.7	1081.3
150°	1102.0	1101.6	1101.2	1100.8	1100.4	1100.4	1100.8	1101.2	1101.6	1102.0	1102.4
152.5°	1123.4	1122.5	1121.6	1120.7	1119.7	1119.5	1120.0	1120.4	1120.8	1121.2	1121.6
155°	1150.8	1149.6	1148.3	1147.2	1145.9	1145.5	1145.9	1146.3	1146.8	1147.2	1147.8
157.5°	1172.0	1171.2	1170.5	1169.8	1169.0	1168.7	1168.8	1168.8	1168.9	1168.9	1169.5
160°	1186.8	1185.5	1184.3	1183.0	1181.9	1181.3	1181.5	1181.7	1181.9	1182.1	1183.0
162.5°	1198.5	1197.3	1196.0	1194.8	1193.6	1193.1	1193.3	1193.5	1193.7	1193.9	1195.1
165°	1214.3	1213.1	1211.9	1210.7	1209.4	1208.9	1209.1	1209.3	1209.5	1209.7	1211.0
167.5°	1226.1	1224.9	1223.6	1222.3	1221.1	1220.5	1220.8	1220.9	1221.1	1221.4	1222.8
170°	1232.8	1231.4	1229.9	1228.4	1227.0	1226.5	1226.6	1226.9	1227.0	1227.2	1228.9
172.5°	1237.2	1235.7	1234.3	1232.9	1231.4	1230.9	1231.3	1231.7	1232.0	1232.4	1233.9
175°	1242.0	1240.7	1239.5	1238.3	1237.1	1236.5	1236.8	1237.0	1237.2	1237.4	1239.0
177.5°	1244.2	1243.2	1242.2	1241.3	1240.2	1239.8	1240.0	1240.2	1240.3	1240.5	1241.7
180°	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0



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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°	118.3	123.9	129.6	133.3	135.1	136.9	138.6	140.5
90°	115.4	121.9	128.4	132.8	135.1	137.3	139.6	141.9
92.5°	111.6	117.9	124.2	128.3	130.2	132.2	134.2	136.1
95°	105.3	111.5	117.8	121.8	123.4	125.1	126.7	128.4
97.5°	116.5	115.7	114.9	115.3	116.9	118.6	120.2	121.8
100°	177.7	152.2	126.7	114.2	114.9	115.4	116.1	116.7
102.5°	267.4	266.5	265.5	258.8	246.3	233.9	221.3	208.8
105°	342.7	347.5	352.2	355.3	356.7	358.2	359.7	361.2
107.5°	410.4	415.2	419.9	422.7	423.6	424.5	425.3	426.2
110°	453.9	457.9	461.8	464.6	466.5	468.3	470.2	472.1



TEST NUMBER: P333289-927

CATALOG NUMBER: S125DIP-S1090D1205U927-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	496.9	500.5	504.1	506.5	507.9	509.3	510.6	512.0
115°	562.4	565.8	569.3	571.1	571.3	571.5	571.7	571.9
117.5°	625.0	627.9	630.9	633.0	634.0	635.1	636.2	637.2
120°	665.5	669.2	672.8	674.9	675.3	675.7	676.0	676.4
122.5°	703.7	707.2	710.6	712.4	712.6	712.9	713.1	713.4
125°	759.7	762.7	765.7	767.5	768.0	768.7	769.2	769.8
127.5°	810.2	813.3	816.3	817.8	817.7	817.5	817.4	817.3
130°	843.8	846.4	849.2	850.6	850.8	851.0	851.1	851.3
132.5°	874.5	877.7	880.9	882.5	882.4	882.4	882.4	882.3
135°	918.9	921.6	924.3	925.6	925.6	925.5	925.5	925.4
137.5°	961.2	964.0	966.9	968.3	968.2	968.0	968.0	967.9
140°	986.8	989.8	992.9	994.3	994.0	993.7	993.5	993.2
142.5°	1012.4	1014.8	1017.1	1018.1	1017.8	1017.6	1017.2	1017.0
145°	1049.6	1051.0	1052.3	1052.9	1052.7	1052.3	1052.1	1051.8
147.5°	1081.9	1082.5	1083.2	1083.0	1081.9	1080.9	1079.8	1078.8
150°	1102.9	1103.3	1103.7	1103.2	1101.8	1100.3	1099.0	1097.6
152.5°	1122.0	1122.4	1122.8	1122.3	1120.9	1119.4	1118.0	1116.6
155°	1148.3	1149.0	1149.6	1149.1	1147.5	1145.8	1144.1	1142.6
157.5°	1170.2	1170.8	1171.5	1171.0	1169.3	1167.8	1166.1	1164.4
160°	1183.8	1184.6	1185.4	1185.0	1183.4	1181.7	1180.1	1178.5
162.5°	1196.2	1197.4	1198.5	1198.2	1196.4	1194.5	1192.8	1191.0
165°	1212.2	1213.5	1214.7	1214.4	1212.8	1211.2	1209.5	1207.9
167.5°	1224.3	1225.7	1227.2	1227.1	1225.2	1223.4	1221.5	1219.7
170°	1230.5	1232.2	1233.8	1233.7	1231.8	1230.0	1228.2	1226.3
172.5°	1235.3	1236.8	1238.3	1238.1	1236.3	1234.5	1232.6	1230.7
175°	1240.6	1242.3	1243.9	1243.8	1242.0	1240.2	1238.3	1236.4
177.5°	1242.8	1244.0	1245.1	1245.0	1243.7	1242.4	1241.0	1239.8
180°	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0	1242.0

(END OF REPORT)