

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: P333282-935

Luminaire Tested: **S125DIP-S1090D1035U935-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333282-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
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-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 1090 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6871.5 lumens
Efficiency: N/A
Efficacy: 113.6 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

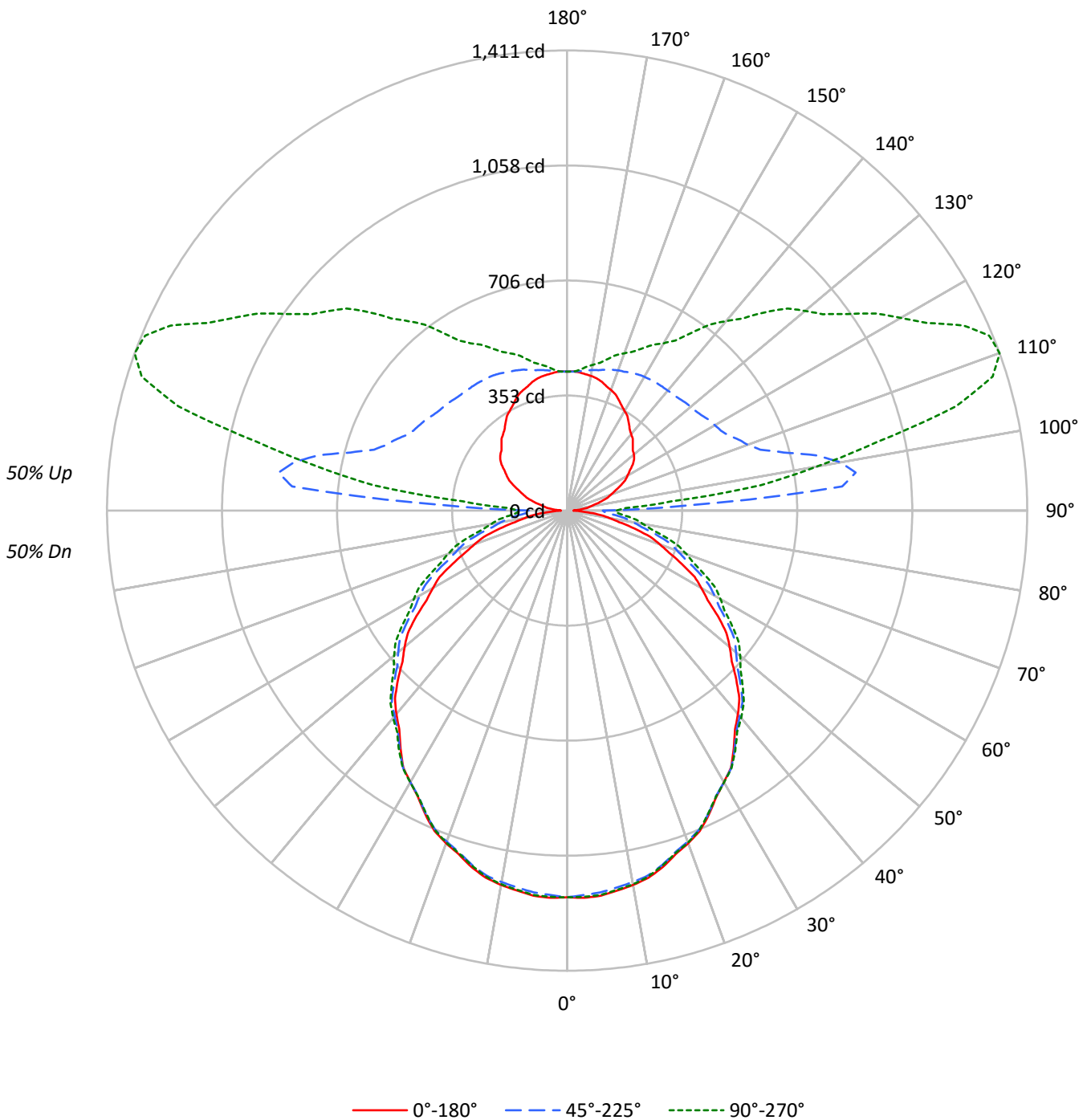
Input Watts (W): 60.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	97	92	88	84	89	85	82	78	72	69	67	60	58	56	49	47	46	41
2	88	80	74	68	81	74	69	64	63	58	55	52	49	46	42	40	38	34
3	80	70	63	57	74	65	58	53	55	50	46	46	42	39	37	35	32	28
4	73	62	54	48	67	57	50	45	49	43	39	41	36	33	33	30	28	24
5	67	55	47	41	62	51	44	38	44	38	33	36	32	29	30	27	24	21
6	62	49	41	35	57	46	38	33	39	33	29	33	28	25	27	24	21	18
7	57	45	36	31	52	41	34	29	35	30	25	30	25	22	25	21	19	16
8	53	40	33	27	49	38	31	26	32	27	23	27	23	20	23	19	17	14
9	49	37	29	24	45	34	27	23	30	24	20	25	21	18	21	17	15	13
10	46	34	26	22	42	32	25	20	27	22	18	23	19	16	19	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



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.1	1.6
10°-20°	318.2	4.6
20°-30°	473.3	6.9
30°-40°	560.6	8.2
40°-50°	579.6	8.4
50°-60°	533.9	7.8
60°-70°	431.6	6.3
70°-80°	289.0	4.2
80°-90°	152.3	2.2
90°-100°	393.1	5.7
100°-110°	726.3	10.6
110°-120°	665.0	9.7
120°-130°	528.8	7.7
130°-140°	415.8	6.1
140°-150°	308.1	4.5
150°-160°	215.4	3.1
160°-170°	126.9	1.8
170°-180°	41.3	0.6
0°-30°	903.6	13.2
0°-40°	1464.2	21.3
0°-60°	2577.8	37.5
0°-90°	3450.7	50.2
90°-120°	1784.4	26.0
90°-150°	3037.1	44.2
90°-180°	3421.0	49.8
0°-180°	6871.5	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	150	14
95°	44	130	846	455	321	42
105°	108	166	687	1313	1234	113
115°	181	226	546	1144	1342	178
125°	245	287	506	902	1051	217
135°	284	341	485	743	860	221
145°	330	376	478	601	665	206
155°	375	403	466	526	549	173
165°	409	420	447	474	481	115
175°	425	425	429	434	432	40
180°	426	426	426	426	426	



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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	44.9	53.5	62.1	70.7	79.6	88.5	97.6	106.6	115.7	121.8
90°	19.5	28.6	38.6	48.6	58.5	68.8	78.4	88.9	98.6	109.1	115.9
92.5°	27.2	37.1	52.0	70.3	92.7	126.1	182.0	269.8	364.2	368.7	321.7
95°	43.5	51.1	64.7	80.8	106.4	152.8	253.7	451.5	697.5	846.4	835.8
97.5°	60.8	67.9	78.8	94.3	117.3	152.4	221.7	368.8	625.4	892.3	1027.3
100°	72.9	80.1	88.9	103.8	125.6	158.3	216.4	336.3	561.2	850.5	1070.8
102.5°	86.4	92.5	100.3	115.5	135.3	167.0	219.5	321.3	512.3	781.4	1038.0
105°	107.6	111.8	120.1	132.9	150.8	180.8	226.4	310.6	461.8	687.1	938.9
107.5°	128.2	133.5	141.0	151.6	169.4	196.6	240.6	313.5	438.1	621.1	839.1
110°	143.1	147.9	154.5	165.3	181.2	208.8	251.2	317.8	429.0	589.3	781.5



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	158.9	163.1	168.3	178.6	193.9	220.3	261.2	324.1	425.5	569.0	737.7
115°	180.6	184.1	188.5	198.0	212.8	238.5	277.0	333.6	422.8	545.5	688.6
117.5°	200.1	203.8	207.8	216.7	232.5	257.1	293.5	345.3	423.3	531.2	656.8
120°	213.8	217.1	221.4	229.9	245.3	270.1	306.2	353.4	425.5	523.4	638.6
122.5°	227.3	229.5	232.7	240.8	257.1	281.6	317.5	362.4	426.8	516.3	622.3
125°	245.3	246.8	250.8	258.3	274.4	299.2	332.7	374.8	429.8	506.4	599.9
127.5°	258.4	260.7	266.0	275.5	292.7	316.9	348.5	386.8	434.5	498.9	578.8
130°	267.3	269.7	276.3	287.2	305.0	329.0	359.3	395.5	437.9	494.7	565.4
132.5°	273.3	276.6	284.7	297.2	315.9	339.6	369.0	402.4	441.2	491.0	553.5
135°	284.2	287.4	297.5	311.0	328.7	352.8	381.2	411.4	445.0	485.4	537.8
137.5°	298.1	300.5	309.9	323.5	341.0	365.2	390.3	418.4	449.4	482.3	524.5
140°	305.4	308.0	318.3	332.1	348.4	371.8	396.9	423.0	450.7	480.2	517.5
142.5°	315.0	316.8	326.1	339.7	355.2	376.9	400.5	425.0	451.2	479.1	511.7
145°	329.5	331.0	339.3	351.0	366.3	385.9	408.3	429.7	453.0	477.9	505.0
147.5°	343.5	344.5	351.9	363.1	376.4	393.8	413.5	432.8	453.8	475.6	498.8
150°	352.4	354.1	360.2	371.3	383.3	398.0	416.9	434.9	453.8	473.6	494.2
152.5°	362.1	363.1	368.4	378.2	389.5	402.8	420.3	436.3	453.1	470.9	489.4
155°	374.7	374.7	379.9	388.5	397.1	409.1	423.7	437.5	451.3	465.9	481.3
157.5°	386.1	385.9	390.0	397.4	405.0	414.1	426.6	438.3	449.0	460.7	473.7
160°	393.6	392.8	396.2	402.3	409.1	416.9	428.0	438.3	446.9	457.3	467.6
162.5°	399.8	399.0	402.4	407.8	413.3	419.7	429.4	437.6	444.9	453.1	462.1
165°	409.1	407.4	410.0	414.3	417.8	422.9	429.7	436.6	441.8	446.9	453.8
167.5°	415.3	414.5	416.0	418.4	420.9	424.0	429.7	434.5	437.0	440.9	445.7
170°	419.5	418.6	419.5	421.2	422.9	425.4	429.7	433.2	434.9	437.5	440.9
172.5°	422.2	420.7	421.5	423.2	424.2	425.4	429.0	431.8	432.1	433.3	436.1
175°	425.4	423.7	424.6	425.4	425.4	425.4	428.0	429.7	428.9	428.9	429.7
177.5°	427.0	425.6	425.6	426.3	425.6	425.6	427.0	427.7	426.3	426.3	427.0
180°	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3



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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°	127.9	134.1	140.2	144.4	146.2	148.0	150.0	151.8
90°	122.7	129.5	136.3	141.9	143.7	145.5	148.2	150.0
92.5°	255.4	219.3	197.7	188.8	179.6	179.3	179.9	180.4
95°	714.2	589.3	489.2	420.8	361.5	337.5	332.5	320.6
97.5°	1010.2	924.0	826.5	729.7	678.4	632.0	608.8	599.5
100°	1142.5	1105.8	1022.6	936.8	879.0	818.6	788.4	776.2
102.5°	1184.4	1215.6	1178.3	1121.2	1059.3	1016.8	983.9	975.1
105°	1150.4	1273.2	1316.3	1310.3	1284.6	1258.1	1242.7	1234.2
107.5°	1047.8	1210.0	1312.2	1360.5	1376.0	1377.4	1373.3	1368.0
110°	972.1	1140.3	1266.4	1342.8	1383.3	1401.4	1409.3	1411.1



TEST NUMBER: P333282-935

CATALOG NUMBER: S125DIP-S1090D1035U935-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	911.5	1071.3	1198.6	1288.0	1346.3	1376.1	1392.9	1400.9
115°	835.1	972.9	1095.4	1192.1	1260.8	1303.6	1329.1	1341.9
117.5°	783.3	902.5	1008.3	1097.3	1166.1	1210.5	1236.1	1244.7
120°	754.8	862.3	961.2	1039.8	1105.0	1147.8	1172.6	1181.0
122.5°	732.1	831.8	920.2	993.9	1052.2	1091.6	1116.4	1124.1
125°	699.4	791.2	870.1	934.7	984.1	1020.6	1040.9	1050.8
127.5°	665.9	751.6	825.2	885.8	930.9	963.5	982.9	988.3
130°	645.6	724.8	795.5	853.8	898.0	927.7	946.2	952.6
132.5°	624.7	699.0	763.5	819.7	863.8	893.2	910.1	917.1
135°	596.2	658.8	717.2	768.5	807.6	837.3	854.0	860.5
137.5°	572.5	623.5	672.3	715.9	750.8	777.7	792.9	799.6
140°	559.0	602.2	644.5	682.6	715.4	738.8	752.8	758.1
142.5°	547.3	583.9	620.4	653.4	681.5	701.4	714.6	719.3
145°	532.9	560.9	588.8	613.1	634.8	650.5	660.9	665.4
147.5°	520.1	542.3	563.1	581.1	597.9	610.0	616.0	618.0
150°	513.2	532.0	548.4	564.0	577.1	587.7	591.4	592.5
152.5°	506.3	523.1	538.0	550.1	561.0	569.3	572.8	573.7
155°	495.9	509.7	521.8	531.2	539.8	545.8	548.4	549.2
157.5°	485.6	497.0	506.3	513.7	520.4	525.3	527.7	527.5
160°	478.7	487.3	495.9	502.0	508.0	512.3	514.0	513.2
162.5°	471.2	479.1	486.3	491.6	496.3	499.9	500.2	500.1
165°	460.7	466.7	471.9	476.1	479.6	481.3	481.3	481.3
167.5°	450.7	454.7	458.7	461.8	463.5	465.0	464.3	464.2
170°	445.2	447.8	450.4	452.1	453.8	454.7	454.7	453.8
172.5°	439.0	441.6	443.5	444.5	444.9	446.4	445.1	444.2
175°	432.3	432.3	434.0	434.0	434.0	434.9	433.2	432.3
177.5°	427.7	428.3	428.3	428.3	427.7	428.3	426.3	426.3
180°	426.3	426.3	426.3	426.3	426.3	426.3	426.3	426.3

(END OF REPORT)