

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: P333579-927

Luminaire Tested: **S125RDIP-S850D1205U927-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333579-927
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: S125RDIP-S850D1205U927-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5999.8 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

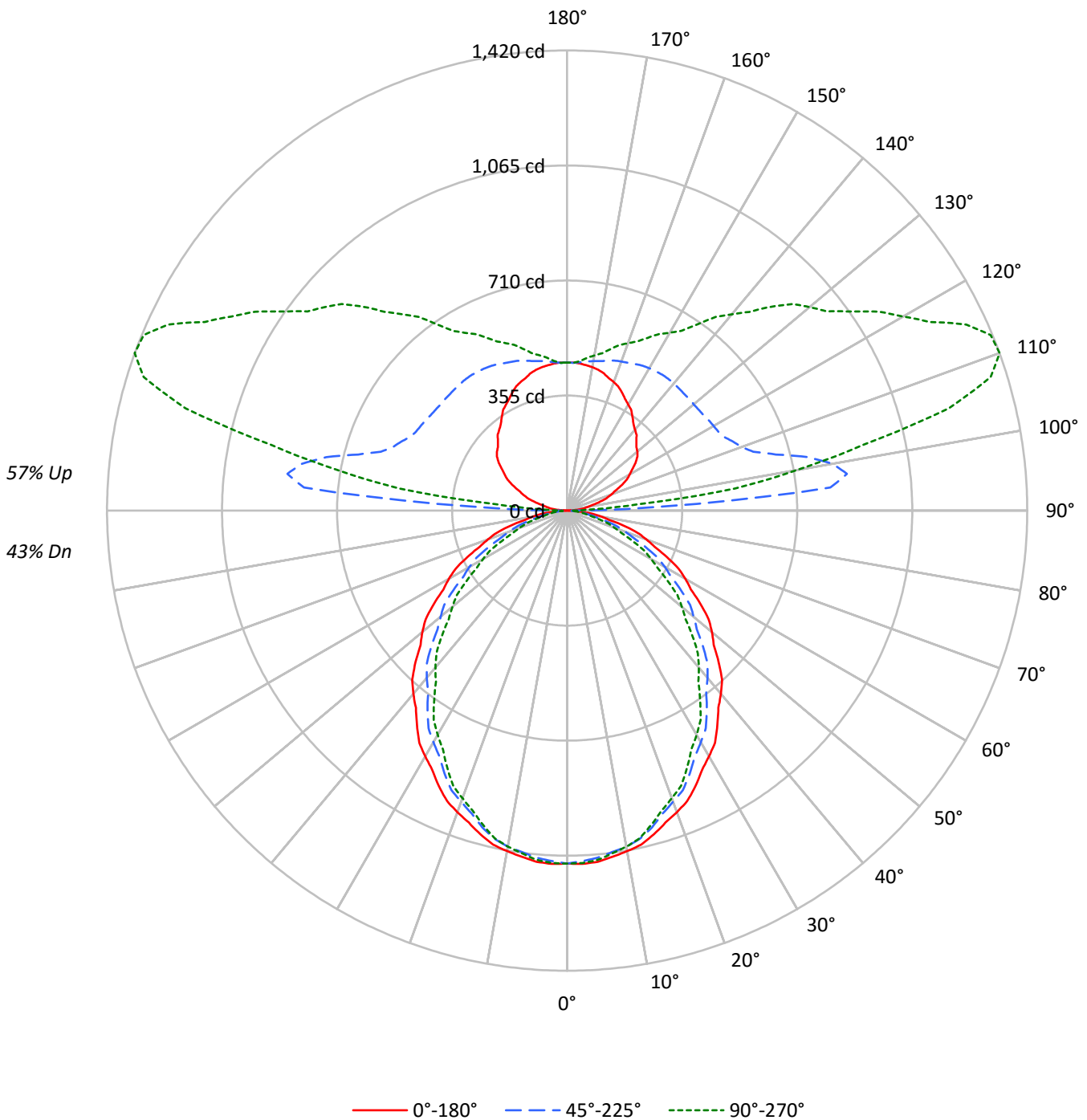
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	105	105	105	105	96	96	96	96	79	79	79	64	64	64	50	50	50	43
1	96	92	88	85	88	84	81	78	70	68	66	56	55	54	44	43	42	37
2	88	81	75	70	80	74	69	65	61	58	55	50	47	45	39	37	36	31
3	80	71	64	58	73	65	59	54	54	50	46	44	41	38	35	33	31	26
4	73	63	55	49	67	58	51	46	48	43	39	39	36	33	31	29	27	23
5	67	56	48	42	61	52	45	39	43	38	34	35	32	29	28	25	23	20
6	62	50	42	37	57	46	39	34	39	34	30	32	28	25	26	23	21	18
7	57	45	38	32	52	42	35	30	35	30	26	29	25	22	23	20	18	16
8	53	41	34	28	49	38	31	27	32	27	23	27	23	20	21	19	16	14
9	50	38	30	25	45	35	28	24	30	24	21	25	21	18	20	17	15	13
10	46	34	27	23	42	32	26	21	27	22	19	23	19	16	18	16	14	12

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7035	7035	7035
5°	7052	6971	7014
10°	6998	6906	6906
15°	6915	6766	6711
20°	6808	6570	6491
25°	6683	6379	6238
30°	6528	6154	5957
35°	6370	5922	5643
40°	6222	5681	5334
45°	6042	5411	4997
50°	5861	5117	4646
55°	5650	4835	4271
60°	5441	4495	3867
65°	5193	4099	3406
70°	4910	3603	2936
75°	4517	3039	2443
80°	3976	2388	2049
85°	3349	1949	1830



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	102.4	1.7
10°-20°	286.2	4.8
20°-30°	415.1	6.9
30°-40°	473.1	7.9
40°-50°	461.1	7.7
50°-60°	388.2	6.5
60°-70°	272.1	4.5
70°-80°	139.9	2.3
80°-90°	37.9	0.6
90°-100°	330.9	5.5
100°-110°	711.4	11.9
110°-120°	667.6	11.1
120°-130°	541.1	9.0
130°-140°	434.2	7.2
140°-150°	327.7	5.5
150°-160°	230.6	3.8
160°-170°	136.0	2.3
170°-180°	44.2	0.7
0°-30°	803.8	13.4
0°-40°	1276.8	21.3
0°-60°	2126.1	35.4
0°-90°	2576.0	42.9
90°-120°	1710.0	28.5
90°-150°	3013.0	50.2
90°-180°	3424.0	57.1
0°-180°	5999.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1089	1089	1089	1089	1089	
5°	1088	1084	1075	1083	1082	103
15°	1034	1029	1012	1011	1004	291
25°	938	925	895	885	875	431
35°	808	787	751	728	716	506
45°	662	636	592	561	547	510
55°	502	474	429	394	379	449
65°	340	311	268	236	223	336
75°	181	156	122	104	98	192
85°	45	31	26	26	25	51
90°	1	8	15	19	21	4
95°	30	90	816	370	216	32
105°	104	145	667	1314	1220	110
115°	186	224	536	1155	1359	183
125°	258	302	514	919	1071	229
135°	302	363	510	770	889	234
145°	352	403	512	637	701	220
155°	401	432	499	564	588	185
165°	438	450	479	508	516	123
175°	456	456	459	465	463	43
180°	456	456	456	456	456	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3
2.5°	1091.2	1090.8	1090.4	1090.0	1089.5	1088.5	1087.1	1085.6	1084.2	1082.7	1084.2
5°	1087.7	1087.0	1086.2	1085.4	1084.7	1083.4	1081.3	1079.3	1077.3	1075.3	1077.1
7.5°	1077.0	1076.3	1075.5	1074.8	1074.2	1072.6	1070.2	1067.8	1065.4	1063.0	1064.2
10°	1067.1	1066.5	1066.0	1065.4	1064.9	1063.3	1060.8	1058.2	1055.7	1053.1	1053.6
12.5°	1055.9	1055.2	1054.5	1053.8	1053.1	1051.1	1047.6	1044.2	1040.8	1037.3	1037.7
15°	1034.2	1033.1	1032.0	1030.9	1029.8	1027.3	1023.5	1019.6	1015.8	1011.9	1011.8
17.5°	1009.6	1008.0	1006.3	1004.6	1002.9	999.7	994.8	990.0	985.2	980.3	979.5
20°	990.5	988.7	986.9	985.1	983.3	979.4	973.6	967.7	961.9	956.0	955.1
22.5°	969.5	967.7	965.8	964.0	962.2	958.2	952.0	945.9	939.8	933.7	931.8
25°	937.9	935.2	932.4	929.7	926.9	922.2	915.4	908.6	901.9	895.2	892.8
27.5°	901.7	898.4	895.1	891.8	888.4	883.1	875.9	868.6	861.4	854.1	850.8
30°	875.4	871.9	868.5	865.0	861.5	855.9	848.3	840.6	832.9	825.2	821.0
32.5°	849.7	845.7	841.6	837.6	833.5	827.5	819.8	811.9	804.1	796.2	791.6
35°	807.9	803.5	799.2	794.7	790.4	784.0	775.9	767.6	759.4	751.1	745.8
37.5°	766.9	761.6	756.3	750.9	745.6	738.7	730.2	721.7	713.2	704.7	698.4
40°	738.0	732.5	727.0	721.5	716.1	708.9	700.1	691.3	682.6	673.8	666.9
42.5°	707.7	702.1	696.5	690.8	685.2	677.9	668.8	659.7	650.6	641.6	634.9
45°	661.5	656.2	650.9	645.5	640.2	632.6	622.5	612.5	602.5	592.4	585.0
47.5°	613.6	608.0	602.4	596.8	591.2	583.4	573.2	563.1	552.9	542.8	535.3
50°	583.3	577.3	571.2	565.2	559.2	551.0	540.5	530.1	519.7	509.3	501.6
52.5°	550.4	544.2	538.1	531.9	525.7	517.7	507.9	498.0	488.1	478.3	470.1
55°	501.8	496.0	490.2	484.3	478.5	470.4	460.2	450.0	439.7	429.4	421.2
57.5°	452.8	446.6	440.3	434.0	427.9	419.8	409.9	400.0	390.1	380.2	372.2
60°	421.2	414.9	408.4	402.0	395.6	387.5	377.6	367.7	357.9	348.0	340.0
62.5°	387.7	381.6	375.5	369.3	363.2	355.2	345.2	335.2	325.1	315.1	307.7
65°	339.8	333.6	327.3	321.2	314.9	307.0	297.3	287.6	277.9	268.2	260.9
67.5°	292.2	286.0	279.8	273.6	267.4	259.6	250.3	241.1	231.8	222.4	215.8
70°	260.0	253.7	247.6	241.3	235.1	227.4	218.3	209.1	200.0	190.8	185.2
72.5°	228.4	222.3	216.3	210.2	204.1	196.8	188.2	179.7	171.1	162.6	157.3
75°	181.0	175.5	170.0	164.5	159.1	152.5	144.8	137.1	129.4	121.8	117.7
77.5°	134.0	129.5	125.2	120.8	116.4	111.1	105.0	98.9	92.7	86.6	83.7
80°	106.9	102.6	98.2	93.8	89.4	84.7	79.5	74.4	69.3	64.2	62.5
82.5°	80.6	76.7	72.7	68.8	64.8	61.1	57.6	54.1	50.5	47.1	46.3
85°	45.2	42.0	38.7	35.4	32.1	29.9	29.1	28.1	27.3	26.3	26.1
87.5°	15.3	14.5	13.9	13.2	12.5	12.3	12.4	12.6	12.6	12.8	13.0
90°	1.0	1.8	3.6	5.5	7.4	9.2	10.1	12.0	12.9	14.7	15.7
92.5°	11.2	13.6	21.4	32.8	48.6	75.5	125.7	210.1	301.6	296.8	240.3
95°	30.3	31.3	38.7	48.8	69.0	110.4	209.0	411.5	665.5	815.6	798.0
97.5°	50.5	51.6	56.7	66.9	85.1	114.9	180.1	328.4	594.3	870.9	1009.8
100°	64.4	66.3	69.9	80.1	97.6	125.2	178.6	298.3	530.2	831.2	1061.3
102.5°	79.9	81.0	84.0	94.8	110.8	137.7	185.2	285.7	481.6	761.2	1030.4
105°	104.0	104.0	108.6	117.8	132.5	158.4	198.8	280.7	434.4	667.3	931.5
107.5°	127.5	129.4	133.8	141.4	156.7	179.8	219.0	289.2	414.5	602.7	830.7
110°	144.5	146.4	150.0	158.4	172.1	196.1	233.8	297.3	408.7	572.5	773.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	161.4	163.3	166.2	174.5	188.3	211.5	247.8	307.6	408.7	554.8	730.5
115°	185.9	187.7	190.5	198.8	212.6	235.7	269.7	323.1	411.5	535.8	683.9
117.5°	208.0	210.8	213.7	222.0	237.7	259.9	292.2	340.8	417.6	526.3	656.1
120°	222.8	225.5	229.2	237.5	253.1	276.2	308.4	352.5	423.4	521.9	640.6
122.5°	238.2	240.3	243.2	251.4	268.6	291.6	323.8	365.8	428.6	518.2	627.4
125°	257.7	259.6	264.2	272.4	289.9	313.9	344.3	383.8	437.2	513.7	609.3
127.5°	273.0	275.8	281.7	292.2	310.8	334.7	363.9	400.4	446.9	511.4	592.8
130°	282.6	285.3	292.7	304.7	324.0	347.9	376.4	411.5	452.9	509.9	581.8
132.5°	289.9	293.4	302.3	315.8	335.8	359.7	388.2	421.0	459.5	509.9	572.9
135°	301.9	305.6	316.6	331.4	350.7	375.6	404.1	434.4	468.5	509.9	562.4
137.5°	317.0	319.8	330.1	344.8	363.8	389.4	415.3	444.4	476.8	511.0	553.0
140°	325.8	328.6	339.7	354.4	371.9	396.7	423.4	451.1	480.5	511.7	548.6
142.5°	336.1	338.2	348.5	363.2	380.0	403.4	428.6	454.7	482.7	512.5	544.9
145°	351.6	353.5	362.7	375.6	392.1	413.3	437.2	460.3	485.1	511.7	539.4
147.5°	367.8	368.9	376.8	388.8	403.1	421.8	442.8	463.6	486.0	509.4	533.7
150°	377.4	379.2	385.7	397.7	410.5	426.2	446.4	465.8	486.0	507.2	529.3
152.5°	387.7	388.8	394.5	405.0	417.2	431.3	450.1	467.2	485.3	504.2	524.1
155°	401.3	401.3	406.9	416.1	425.2	438.2	453.8	468.5	483.2	498.9	515.5
157.5°	413.5	413.3	417.7	425.6	433.7	443.5	456.9	469.4	480.9	493.4	507.4
160°	421.6	420.6	424.4	430.8	438.2	446.4	458.4	469.4	478.6	489.7	500.7
162.5°	428.2	427.3	430.9	436.7	442.6	449.4	459.9	468.7	476.4	485.3	494.9
165°	438.2	436.3	439.1	443.7	447.3	452.9	460.3	467.6	473.1	478.6	486.0
167.5°	444.8	443.9	445.5	448.1	450.7	454.2	460.3	465.4	467.9	472.2	477.4
170°	449.2	448.3	449.2	451.1	452.9	455.7	460.3	463.9	465.8	468.5	472.2
172.5°	452.2	450.5	451.4	453.2	454.3	455.7	459.5	462.5	462.8	464.1	467.1
175°	455.7	453.8	454.7	455.7	455.7	455.7	458.4	460.3	459.3	459.3	460.3
177.5°	457.3	455.8	455.8	456.5	455.8	455.8	457.3	458.0	456.5	456.5	457.3
180°	456.5	456.5	456.5	456.5	456.5	456.5	456.5	456.5	456.5	456.5	456.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3	1089.3
2.5°	1085.6	1087.1	1088.5	1089.3	1089.1	1088.9	1088.8	1088.6
5°	1079.0	1080.8	1082.6	1083.4	1083.0	1082.6	1082.3	1081.9
7.5°	1065.6	1066.8	1068.1	1068.5	1068.1	1067.7	1067.3	1066.9
10°	1054.2	1054.7	1055.3	1055.3	1054.7	1054.2	1053.6	1053.1
12.5°	1038.1	1038.5	1038.9	1038.7	1037.8	1037.0	1036.2	1035.3
15°	1011.6	1011.4	1011.2	1010.3	1008.7	1007.0	1005.4	1003.7
17.5°	978.5	977.6	976.7	975.6	974.2	972.9	971.5	970.2
20°	954.2	953.2	952.4	951.1	949.4	947.8	946.1	944.5
22.5°	930.0	928.3	926.5	924.9	923.5	922.2	920.8	919.5
25°	890.4	888.0	885.7	883.4	881.4	879.4	877.4	875.4
27.5°	847.5	844.1	840.8	838.2	836.3	834.3	832.4	830.4
30°	816.8	812.6	808.3	805.5	803.8	802.2	800.5	798.8
32.5°	787.0	782.3	777.7	774.3	772.2	770.2	768.0	766.0
35°	740.5	735.2	729.9	726.0	723.4	720.9	718.4	715.7
37.5°	692.1	685.6	679.3	674.9	672.4	669.9	667.4	665.0
40°	659.9	653.0	646.0	641.4	639.3	637.1	634.9	632.7
42.5°	628.3	621.6	615.0	610.0	606.8	603.6	600.3	597.1
45°	577.7	570.5	563.1	558.1	555.3	552.6	549.9	547.1
47.5°	527.8	520.2	512.7	507.4	504.4	501.4	498.3	495.3
50°	493.9	486.2	478.6	473.3	470.6	467.9	465.1	462.4
52.5°	461.8	453.5	445.3	439.7	437.0	434.3	431.6	428.8
55°	413.0	404.8	396.6	390.9	388.1	385.2	382.2	379.3
57.5°	364.2	356.2	348.1	342.8	340.2	337.5	335.0	332.4
60°	331.9	323.8	315.8	310.5	307.7	305.0	302.2	299.4
62.5°	300.2	292.7	285.3	280.2	277.4	274.6	272.0	269.2
65°	253.6	246.3	238.9	233.9	231.2	228.5	225.7	222.9
67.5°	209.1	202.4	195.7	191.2	189.1	186.9	184.7	182.5
70°	179.5	173.9	168.2	164.3	162.1	159.9	157.7	155.5
72.5°	152.1	146.9	141.6	138.3	136.8	135.4	134.0	132.5
75°	113.8	109.7	105.7	103.1	101.7	100.4	99.2	97.9
77.5°	80.9	78.1	75.3	73.4	72.5	71.5	70.6	69.6
80°	60.9	59.3	57.6	56.6	56.2	55.8	55.5	55.1
82.5°	45.6	44.8	44.0	43.5	43.3	43.1	42.9	42.6
85°	26.0	25.7	25.6	25.4	25.2	25.0	24.9	24.7
87.5°	13.2	13.4	13.5	13.9	13.7	13.5	13.6	13.5
90°	16.6	17.5	18.4	20.3	20.3	20.3	21.2	21.2
92.5°	163.1	118.4	89.1	75.5	63.7	61.5	60.2	58.7
95°	661.8	521.9	408.7	331.4	266.0	238.4	231.1	216.3
97.5°	985.6	887.6	777.3	669.7	612.8	561.3	534.6	522.8
100°	1132.2	1087.1	992.3	896.5	833.1	766.8	732.7	718.0
102.5°	1181.5	1209.3	1163.9	1099.1	1031.1	984.0	947.0	936.0
105°	1152.5	1278.6	1319.1	1308.9	1279.5	1249.1	1230.7	1219.6
107.5°	1048.6	1216.9	1320.9	1369.0	1383.9	1383.7	1377.6	1370.2
110°	972.0	1146.9	1276.7	1354.9	1396.4	1413.9	1420.3	1420.3



TEST NUMBER: P333579-927

CATALOG NUMBER: S125RDIP-S850D1205U927-4F0-1E-UDD-F4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	911.6	1077.7	1208.9	1301.2	1361.8	1391.8	1407.8	1414.4
115°	835.8	978.5	1104.5	1204.9	1276.7	1320.9	1346.6	1358.6
117.5°	786.8	909.8	1018.4	1110.5	1182.3	1228.0	1253.5	1260.8
120°	760.3	870.8	972.0	1053.0	1121.2	1165.3	1190.2	1197.5
122.5°	740.5	842.8	933.0	1008.8	1069.6	1110.1	1135.0	1141.6
125°	711.5	805.4	885.5	951.8	1003.3	1041.1	1061.3	1070.6
127.5°	682.1	769.7	844.5	906.5	953.2	986.6	1005.8	1009.8
130°	663.7	744.7	816.5	876.3	922.3	952.7	971.1	976.6
132.5°	645.2	721.1	786.2	843.9	889.9	920.3	937.2	943.5
135°	621.3	684.8	743.8	796.2	836.7	867.1	883.7	889.2
137.5°	601.1	652.4	701.4	746.0	782.2	809.8	825.1	831.2
140°	590.0	633.3	675.7	714.3	748.4	772.3	786.1	790.7
142.5°	580.4	617.1	653.6	687.1	716.0	736.2	749.2	753.1
145°	567.9	596.4	625.0	649.8	671.9	687.6	697.8	701.4
147.5°	556.2	579.3	601.3	620.0	637.5	650.1	655.9	657.6
150°	549.5	569.8	587.2	603.8	617.7	628.7	632.4	633.3
152.5°	542.2	560.2	576.2	589.1	600.7	609.5	613.2	614.2
155°	531.1	545.8	558.7	568.9	578.1	584.5	587.2	588.2
157.5°	520.1	532.2	542.2	550.1	557.2	562.6	565.1	565.0
160°	512.7	521.9	531.1	537.6	544.0	548.6	550.5	549.5
162.5°	504.6	513.1	520.8	526.5	531.5	535.4	535.8	535.5
165°	493.4	499.8	505.3	509.9	513.7	515.5	515.5	515.5
167.5°	482.7	487.0	491.2	494.5	496.3	498.0	497.3	497.1
170°	476.8	479.6	482.4	484.2	486.0	487.0	487.0	486.0
172.5°	470.2	472.9	475.0	476.1	476.4	478.1	476.7	475.7
175°	463.0	463.0	464.9	464.9	464.9	465.8	463.9	463.0
177.5°	458.0	458.8	458.8	458.8	458.0	458.8	456.5	456.5
180°	456.5	456.5	456.5	456.5	456.5	456.5	456.5	456.5

(END OF REPORT)