

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: P333244-930

Luminaire Tested: **S125DIP-S850D1205U930-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333244-930
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-S850D1205U930-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 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: 6602.9 lumens
Efficiency: N/A
Efficacy: 116.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

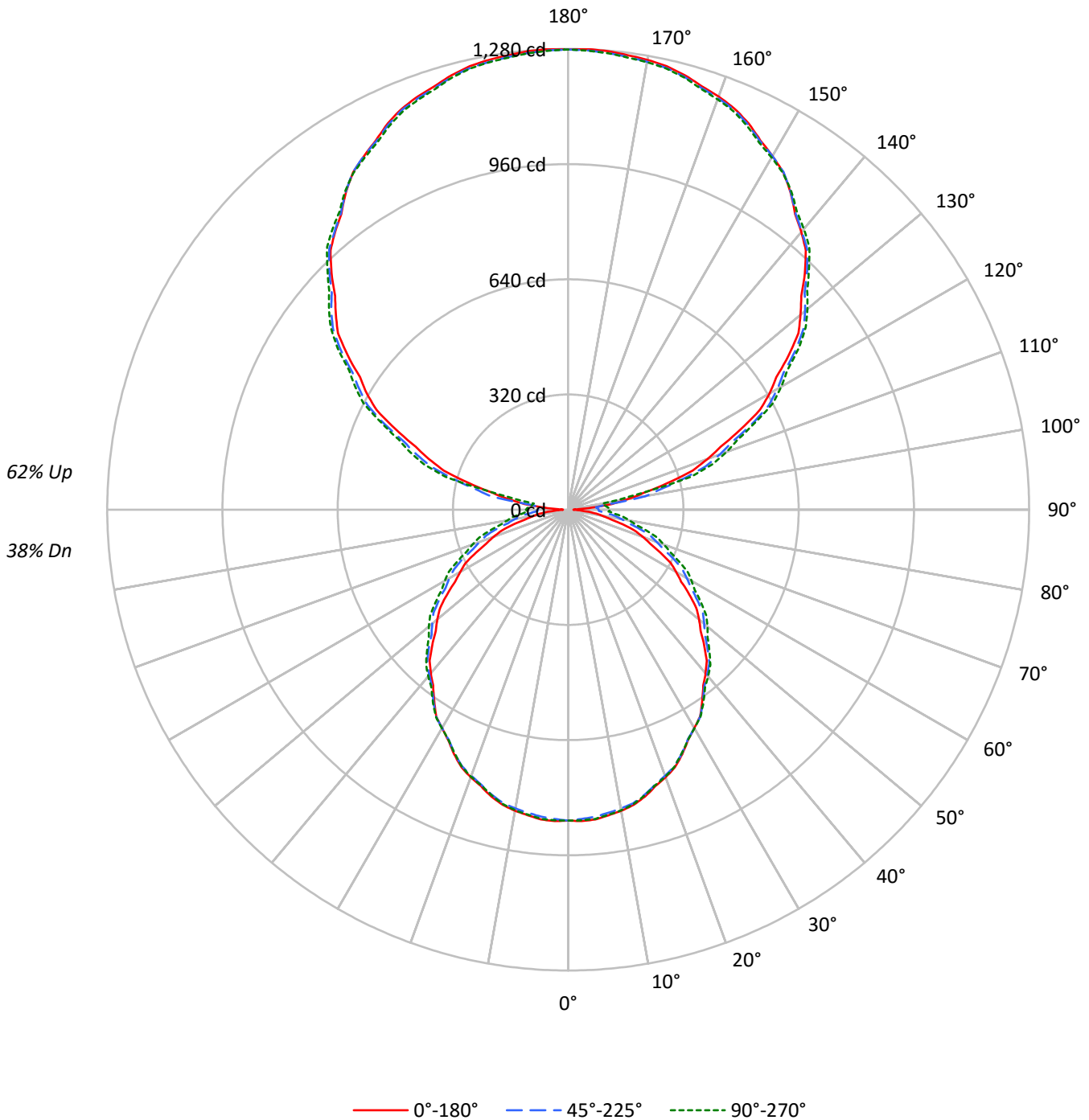
Input Watts (W): 56.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333244-930

CATALOG NUMBER: S125DIP-S850D1205U930-4F0-1E-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	104	104	104	104	95	95	95	95	77	77	77	60	60	60	45	45	45	38
1	95	90	86	82	86	82	78	75	66	64	62	52	50	49	39	38	37	31
2	86	78	72	67	78	71	66	61	58	54	51	45	43	40	34	32	31	25
3	78	69	61	55	71	62	56	51	51	46	42	40	37	34	30	28	26	21
4	71	61	53	47	64	55	48	43	45	40	36	35	32	29	27	24	22	18
5	65	54	46	40	59	49	42	37	40	35	31	32	28	25	24	21	19	16
6	60	48	40	34	54	44	37	32	36	31	27	29	25	22	22	19	17	14
7	55	43	35	30	50	40	33	28	33	27	23	26	22	19	20	17	15	12
8	51	39	31	26	46	36	29	24	30	24	21	24	20	17	18	15	13	11
9	48	36	28	23	43	33	26	22	27	22	18	22	18	15	17	14	12	10
10	45	33	25	21	40	30	24	19	25	20	16	20	16	14	15	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5577	5577	5577
5°	5589	5475	5492
10°	5549	5377	5369
15°	5484	5260	5212
20°	5394	5115	5055
25°	5288	4960	4863
30°	5160	4791	4687
35°	5040	4634	4526
40°	4918	4469	4364
45°	4780	4328	4221
50°	4649	4175	4095
55°	4491	4030	3946
60°	4317	3865	3793
65°	4137	3693	3622
70°	3931	3457	3446
75°	3607	3230	3231
80°	3183	2957	2996
85°	2789	2770	2923



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	81.7	1.2
10°-20°	231.8	3.5
20°-30°	344.8	5.2
30°-40°	408.4	6.2
40°-50°	422.2	6.4
50°-60°	389.0	5.9
60°-70°	314.4	4.8
70°-80°	210.6	3.2
80°-90°	111.9	1.7
90°-100°	107.7	1.6
100°-110°	331.5	5.0
110°-120°	549.5	8.3
120°-130°	683.5	10.4
130°-140°	724.2	11.0
140°-150°	674.2	10.2
150°-160°	544.2	8.2
160°-170°	351.9	5.3
170°-180°	121.4	1.8
0°-30°	658.3	10.0
0°-40°	1066.7	16.2
0°-60°	1877.9	28.4
0°-90°	2514.8	38.1
90°-120°	988.7	15.0
90°-150°	3070.6	46.5
90°-180°	4088.0	61.9
0°-180°	6602.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	864	864	864	864	864	
5°	864	862	856	862	862	82
15°	825	825	820	824	821	232
25°	749	751	747	750	746	345
35°	649	654	652	654	654	406
45°	534	543	548	553	555	412
55°	411	424	438	447	450	367
65°	283	302	323	335	339	280
75°	156	178	205	221	226	165
85°	47	75	104	122	130	50
90°	14	49	85	108	118	11
95°	65	83	77	99	106	77
105°	286	304	329	345	351	303
115°	528	540	562	573	573	523
125°	747	754	770	779	781	667
135°	929	934	938	947	946	716
145°	1076	1077	1077	1082	1080	673
155°	1184	1179	1181	1183	1176	545
165°	1250	1244	1245	1250	1243	353
175°	1278	1273	1274	1280	1272	122
180°	1278	1278	1278	1278	1278	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6
2.5°	865.7	865.4	865.1	864.8	864.5	863.8	862.7	861.7	860.6	859.6	860.6
5°	863.6	863.3	862.9	862.5	862.2	861.3	860.0	858.7	857.4	856.1	857.5
7.5°	856.1	855.9	855.7	855.6	855.4	854.7	853.4	852.0	850.6	849.3	850.6
10°	849.3	849.3	849.3	849.3	849.3	848.6	847.0	845.5	844.0	842.5	843.8
12.5°	839.8	839.9	840.1	840.2	840.4	839.8	838.7	837.5	836.3	835.0	836.1
15°	824.8	824.9	825.1	825.2	825.5	824.9	823.6	822.3	820.9	819.6	820.8
17.5°	805.1	805.4	805.8	806.2	806.6	806.1	804.8	803.5	802.2	800.9	801.7
20°	790.8	791.2	791.6	792.0	792.4	791.9	790.6	789.3	787.9	786.6	787.2
22.5°	774.6	775.3	775.9	776.7	777.3	776.9	775.4	774.0	772.5	771.0	771.8
25°	749.3	749.9	750.5	751.1	751.6	751.3	750.2	749.1	748.0	746.8	747.5
27.5°	721.2	722.1	722.9	723.7	724.6	724.3	723.1	721.8	720.5	719.3	719.7
30°	700.3	701.4	702.5	703.6	704.7	704.7	703.6	702.5	701.4	700.3	700.7
32.5°	681.3	682.2	683.2	684.2	685.2	685.3	684.4	683.6	682.8	682.0	682.3
35°	648.6	650.0	651.3	652.6	653.9	654.3	653.7	653.1	652.6	652.0	652.6
37.5°	615.9	617.1	618.3	619.5	620.8	621.3	621.0	620.9	620.7	620.5	621.3
40°	593.5	595.1	596.6	598.1	599.6	600.2	600.1	599.9	599.7	599.5	600.2
42.5°	569.2	571.1	573.1	575.0	577.0	578.2	578.6	579.0	579.4	579.8	580.7
45°	534.3	536.4	538.4	540.5	542.6	544.0	545.0	545.9	546.9	547.8	549.2
47.5°	498.6	500.5	502.4	504.3	506.2	508.0	509.6	511.3	512.8	514.5	516.4
50°	474.2	476.2	478.3	480.4	482.4	484.5	486.6	488.7	490.7	492.8	494.9
52.5°	448.4	450.9	453.5	456.0	458.5	461.1	463.6	466.1	468.6	471.2	473.4
55°	410.7	413.7	416.7	419.7	422.7	425.7	428.8	431.8	434.7	437.7	439.9
57.5°	372.0	375.7	379.3	382.9	386.5	390.0	393.5	397.0	400.4	403.9	406.3
60°	346.3	350.1	353.8	357.6	361.3	365.2	368.9	372.7	376.4	380.2	383.0
62.5°	321.2	325.0	328.8	332.6	336.3	340.2	344.3	348.4	352.4	356.4	359.6
65°	282.8	287.1	291.5	295.8	300.1	304.5	309.1	313.6	318.1	322.6	325.5
67.5°	246.5	250.8	254.9	259.1	263.3	267.7	272.2	276.9	281.4	286.0	289.4
70°	220.1	224.5	228.8	233.2	237.5	242.1	247.0	251.8	256.7	261.6	265.2
72.5°	194.4	198.9	203.3	207.8	212.3	217.2	222.6	228.0	233.3	238.6	242.5
75°	155.8	160.7	165.6	170.5	175.4	180.8	186.9	192.9	198.9	204.9	208.6
77.5°	118.7	124.3	130.0	135.7	141.3	147.0	152.8	158.6	164.4	170.2	174.3
80°	95.7	101.3	107.0	112.6	118.3	124.3	130.7	137.1	143.5	149.9	154.0
82.5°	74.7	80.6	86.6	92.5	98.5	104.7	111.3	117.8	124.3	130.9	134.9
85°	46.6	52.7	59.0	65.2	71.4	77.8	84.4	91.0	97.6	104.1	108.3
87.5°	26.6	32.9	39.3	45.7	52.0	58.5	65.2	72.0	78.7	85.4	89.8
90°	14.5	22.2	29.9	37.6	45.3	53.1	61.0	68.8	76.7	84.6	90.0
92.5°	26.8	31.1	35.5	39.9	44.4	50.5	58.3	66.2	74.0	81.9	87.1
95°	65.0	69.3	73.5	77.8	82.0	83.4	81.8	80.1	78.6	77.0	82.2
97.5°	122.8	128.2	133.8	139.3	144.9	142.8	133.2	123.5	113.9	104.2	102.2
100°	167.5	172.1	176.8	181.3	185.9	191.6	198.4	205.4	212.2	219.1	191.7
102.5°	213.1	217.6	222.0	226.5	230.9	236.4	242.7	249.1	255.4	261.8	259.7
105°	286.2	290.1	293.9	297.7	301.6	306.4	312.0	317.6	323.3	329.0	332.7
107.5°	362.2	364.7	367.2	369.8	372.3	376.6	382.4	388.2	394.0	399.9	403.7
110°	411.5	413.8	416.0	418.2	420.5	424.4	430.2	435.9	441.6	447.3	450.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	458.4	460.8	463.1	465.4	467.7	471.6	477.0	482.3	487.6	493.0	495.7
115°	528.2	530.5	532.9	535.2	537.6	541.4	546.4	551.5	556.6	561.7	564.3
117.5°	600.2	601.0	601.9	602.7	603.5	606.7	612.0	617.5	623.0	628.4	630.5
120°	645.7	646.0	646.5	646.8	647.1	649.8	654.8	659.7	664.6	669.6	672.4
122.5°	685.2	686.2	687.3	688.4	689.5	692.2	696.7	701.2	705.6	710.1	712.7
125°	747.2	748.4	749.7	751.1	752.4	754.9	758.6	762.4	766.1	769.9	772.1
127.5°	805.7	806.5	807.4	808.3	809.1	811.1	814.0	816.9	819.9	822.9	825.2
130°	842.0	842.9	843.8	844.7	845.5	847.3	850.2	853.0	855.9	858.8	860.7
132.5°	877.8	879.0	880.1	881.3	882.5	883.9	885.4	887.0	888.6	890.1	892.7
135°	929.4	930.4	931.5	932.5	933.6	934.6	935.5	936.4	937.3	938.2	940.2
137.5°	976.7	977.6	978.6	979.6	980.5	981.1	981.4	981.6	981.9	982.1	984.5
140°	1007.1	1007.5	1008.0	1008.4	1008.8	1009.0	1009.0	1008.9	1008.9	1008.9	1011.4
142.5°	1035.2	1035.3	1035.3	1035.5	1035.6	1035.8	1036.2	1036.5	1036.8	1037.1	1038.9
145°	1076.3	1076.5	1076.8	1077.0	1077.3	1077.3	1077.3	1077.3	1077.3	1077.3	1078.5
147.5°	1111.4	1111.3	1111.3	1111.2	1111.1	1111.2	1111.4	1111.7	1112.0	1112.2	1112.7
150°	1134.2	1133.8	1133.3	1132.9	1132.5	1132.5	1132.9	1133.3	1133.8	1134.2	1134.6
152.5°	1156.2	1155.3	1154.3	1153.4	1152.4	1152.2	1152.7	1153.1	1153.5	1153.9	1154.3
155°	1184.4	1183.2	1181.9	1180.6	1179.3	1178.9	1179.3	1179.7	1180.2	1180.6	1181.3
157.5°	1206.2	1205.4	1204.7	1204.0	1203.1	1202.8	1202.9	1202.9	1203.0	1203.0	1203.6
160°	1221.4	1220.1	1218.9	1217.6	1216.3	1215.8	1216.0	1216.2	1216.4	1216.6	1217.5
162.5°	1233.5	1232.2	1230.9	1229.7	1228.4	1227.9	1228.1	1228.3	1228.6	1228.7	1230.0
165°	1249.8	1248.5	1247.2	1246.0	1244.7	1244.2	1244.4	1244.6	1244.8	1245.0	1246.3
167.5°	1261.9	1260.6	1259.3	1258.0	1256.7	1256.1	1256.4	1256.5	1256.8	1257.0	1258.5
170°	1268.8	1267.3	1265.8	1264.3	1262.8	1262.2	1262.4	1262.7	1262.8	1263.1	1264.8
172.5°	1273.3	1271.8	1270.3	1268.9	1267.4	1266.8	1267.2	1267.6	1268.0	1268.4	1269.9
175°	1278.2	1276.9	1275.7	1274.4	1273.2	1272.6	1272.8	1273.1	1273.3	1273.5	1275.1
177.5°	1280.5	1279.4	1278.5	1277.5	1276.4	1276.0	1276.2	1276.4	1276.5	1276.7	1277.9
180°	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	863.6	863.6	863.6	863.6	863.6	863.6	863.6	863.6
2.5°	861.7	862.7	863.8	864.3	864.1	864.0	863.8	863.6
5°	859.1	860.5	862.1	862.7	862.5	862.3	862.2	862.0
7.5°	851.9	853.2	854.5	855.1	854.9	854.8	854.5	854.4
10°	845.1	846.4	847.7	848.3	848.2	848.0	847.7	847.6
12.5°	837.1	838.1	839.1	839.4	838.9	838.4	837.9	837.4
15°	821.9	823.0	824.2	824.3	823.6	822.8	822.1	821.3
17.5°	802.6	803.5	804.3	804.5	804.0	803.6	803.2	802.7
20°	787.7	788.3	788.9	789.1	789.1	789.1	789.1	789.1
22.5°	772.5	773.1	773.9	774.0	773.6	773.1	772.7	772.3
25°	748.4	749.1	749.8	749.7	748.8	747.9	746.9	746.0
27.5°	720.2	720.8	721.3	721.5	721.1	720.7	720.4	720.1
30°	701.0	701.4	701.7	701.9	701.6	701.5	701.3	701.1
32.5°	682.7	683.1	683.5	683.5	683.4	683.2	683.0	682.8
35°	653.1	653.7	654.3	654.5	654.5	654.5	654.5	654.5
37.5°	622.0	622.7	623.5	623.9	623.8	623.7	623.6	623.5
40°	601.0	601.8	602.5	603.1	603.4	603.8	604.2	604.5
42.5°	581.6	582.5	583.4	583.9	584.0	584.1	584.2	584.2
45°	550.5	551.8	553.1	553.8	554.1	554.2	554.4	554.6
47.5°	518.3	520.2	522.1	523.3	523.7	524.2	524.6	525.0
50°	496.9	499.0	501.1	502.4	503.0	503.5	504.1	504.7
52.5°	475.6	477.8	480.0	481.4	481.8	482.2	482.6	483.0
55°	441.9	444.0	446.1	447.4	448.2	449.0	449.7	450.5
57.5°	408.6	411.0	413.4	414.8	415.4	416.0	416.5	417.1
60°	385.8	388.7	391.5	393.1	393.7	394.3	394.8	395.4
62.5°	362.7	365.8	369.0	370.9	371.6	372.3	373.0	373.7
65°	328.2	331.1	333.9	335.7	336.5	337.2	337.9	338.7
67.5°	292.9	296.3	299.7	301.9	302.9	303.9	304.8	305.8
70°	268.8	272.4	276.0	278.3	279.4	280.5	281.7	282.8
72.5°	246.4	250.2	254.1	256.5	257.3	258.1	258.9	259.8
75°	212.5	216.2	220.0	222.3	223.2	224.2	225.1	226.1
77.5°	178.5	182.6	186.8	189.2	190.0	190.7	191.4	192.2
80°	158.2	162.3	166.4	168.8	169.7	170.4	171.1	171.9
82.5°	138.8	142.8	146.8	149.5	150.9	152.2	153.6	155.0
85°	112.4	116.6	120.7	123.5	125.1	126.5	128.1	129.6
87.5°	94.4	99.0	103.5	106.5	107.9	109.3	110.8	112.3
90°	95.4	100.8	106.2	109.7	111.7	113.7	115.6	117.6
92.5°	92.4	97.6	102.8	106.2	107.9	109.4	111.0	112.7
95°	87.3	92.5	97.8	101.0	102.3	103.6	104.9	106.2
97.5°	100.2	98.2	96.3	95.9	97.2	98.5	99.7	101.0
100°	164.2	136.8	109.3	95.8	96.1	96.4	96.7	96.9
102.5°	257.6	255.4	253.3	245.6	232.4	219.2	206.0	192.9
105°	336.5	340.2	344.0	346.4	347.6	348.6	349.8	350.8
107.5°	407.5	411.2	415.0	417.1	417.7	418.2	418.7	419.3
110°	453.1	456.1	459.0	461.2	462.8	464.3	465.9	467.3



TEST NUMBER: P333244-930

CATALOG NUMBER: S125DIP-S850D1205U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	498.3	500.9	503.5	505.3	506.4	507.4	508.4	509.5
115°	566.8	569.4	571.9	573.2	573.0	572.8	572.7	572.6
117.5°	632.6	634.7	636.7	638.2	639.0	639.7	640.4	641.2
120°	675.1	677.9	680.7	682.2	682.2	682.3	682.4	682.5
122.5°	715.3	718.0	720.6	721.9	721.8	721.7	721.6	721.5
125°	774.3	776.4	778.6	779.8	780.2	780.5	780.7	781.1
127.5°	827.5	829.8	832.2	833.1	832.6	832.2	831.7	831.2
130°	862.7	864.8	866.7	867.7	867.6	867.5	867.4	867.2
132.5°	895.2	897.6	900.2	901.3	901.1	900.7	900.5	900.3
135°	942.2	944.3	946.3	947.1	946.8	946.5	946.2	945.8
137.5°	986.8	989.0	991.3	992.3	992.0	991.6	991.3	991.0
140°	1013.9	1016.4	1018.9	1019.9	1019.4	1018.9	1018.3	1017.8
142.5°	1040.8	1042.7	1044.6	1045.2	1044.7	1044.2	1043.7	1043.2
145°	1079.6	1080.8	1082.0	1082.2	1081.7	1081.2	1080.8	1080.2
147.5°	1113.3	1113.9	1114.4	1114.1	1113.0	1111.7	1110.6	1109.4
150°	1135.1	1135.5	1135.9	1135.3	1133.8	1132.4	1130.8	1129.4
152.5°	1154.7	1155.2	1155.6	1155.0	1153.6	1152.1	1150.6	1149.2
155°	1181.9	1182.5	1183.2	1182.6	1181.0	1179.2	1177.5	1175.9
157.5°	1204.4	1205.0	1205.7	1205.2	1203.5	1201.8	1200.1	1198.4
160°	1218.3	1219.1	1220.0	1219.6	1217.9	1216.2	1214.6	1212.8
162.5°	1231.1	1232.3	1233.5	1233.1	1231.3	1229.4	1227.6	1225.7
165°	1247.6	1248.9	1250.1	1249.9	1248.2	1246.5	1244.8	1243.2
167.5°	1260.0	1261.5	1263.1	1262.9	1260.9	1259.1	1257.2	1255.3
170°	1266.4	1268.1	1269.8	1269.7	1267.8	1265.9	1264.0	1262.1
172.5°	1271.4	1272.9	1274.4	1274.2	1272.4	1270.5	1268.5	1266.6
175°	1276.8	1278.6	1280.2	1280.1	1278.2	1276.4	1274.4	1272.5
177.5°	1279.0	1280.3	1281.4	1281.3	1280.0	1278.6	1277.2	1275.9
180°	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2	1278.2

(END OF REPORT)