

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: P333203

Luminaire Tested: **S125DIP-S610D1205U835-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333203
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-S610D1205U835-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6669.1 lumens
Efficiency: N/A
Efficacy: 135.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

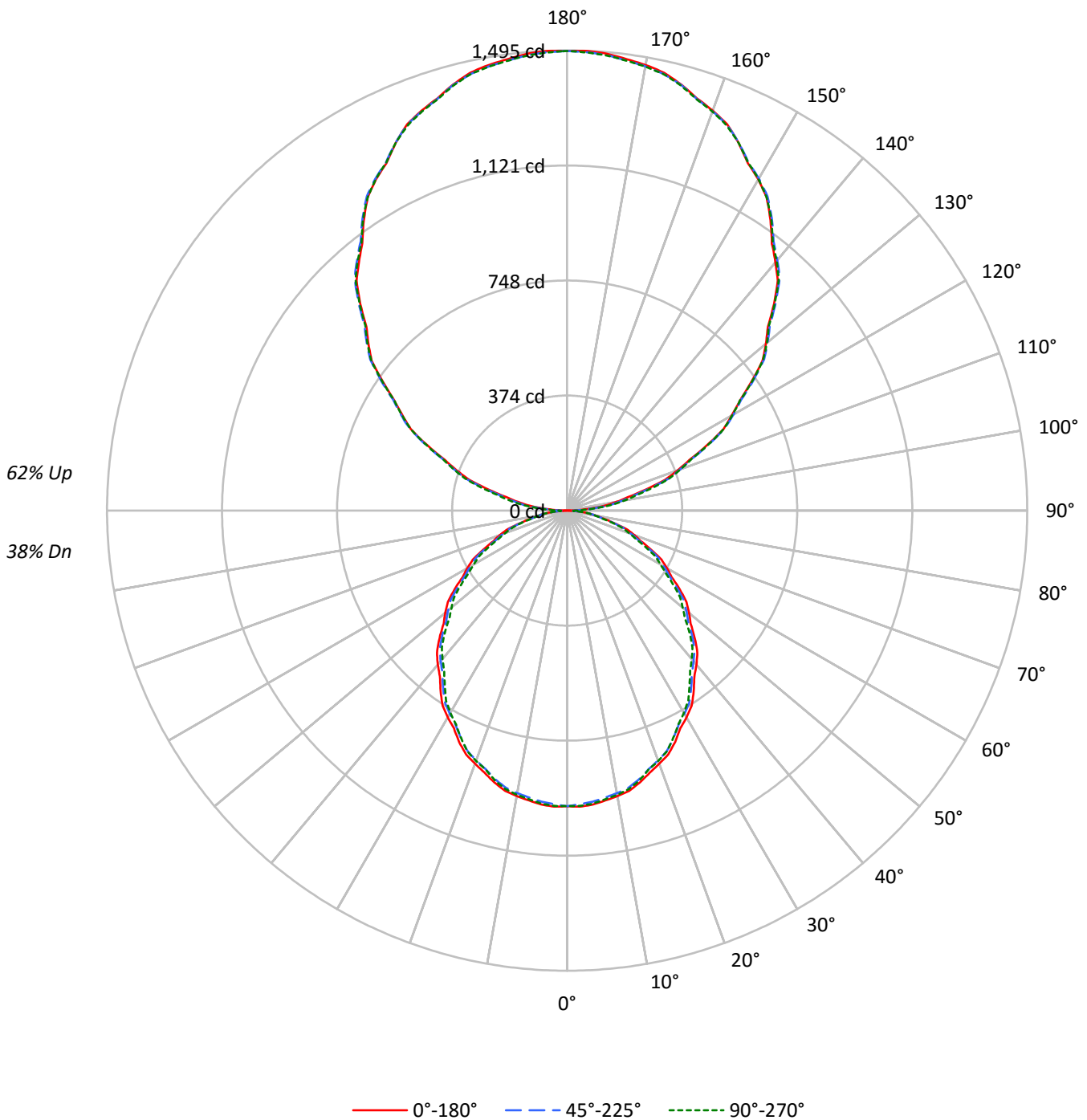
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				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	50	30	10	0
RCR																					
0	104	104	104	104	94	94	94	94	76	76	76	60	60	60	45	45	45	38			38
1	95	91	87	83	86	82	79	76	67	65	62	53	51	50	39	38	38	31			31
2	86	79	73	68	78	72	67	62	58	55	52	46	44	41	35	33	32	26			26
3	79	69	62	57	71	63	57	52	52	47	43	41	38	35	31	29	27	22			22
4	72	61	54	48	65	56	49	44	46	41	37	36	33	30	27	25	23	19			19
5	66	55	47	41	60	50	43	38	41	36	32	32	29	26	25	22	20	17			17
6	61	49	41	35	55	45	38	33	37	31	28	29	25	23	22	20	18	15			15
7	56	44	36	31	51	40	33	29	33	28	24	27	23	20	20	18	16	13			13
8	52	40	32	27	47	37	30	25	30	25	21	24	20	18	19	16	14	12			12
9	48	36	29	24	44	33	27	22	28	23	19	22	19	16	17	15	13	10			10
10	45	33	26	21	41	31	24	20	25	21	17	21	17	14	16	13	11	9			9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6203	6203	6203
5°	6217	6157	6196
10°	6178	6114	6149
15°	6111	6040	6066
20°	6016	5937	5948
25°	5912	5815	5810
30°	5785	5683	5655
35°	5649	5541	5463
40°	5509	5387	5311
45°	5358	5246	5142
50°	5191	5077	4924
55°	5031	4884	4748
60°	4839	4691	4525
65°	4609	4459	4308
70°	4390	4190	4047
75°	4000	3868	3735
80°	3559	3503	3418
85°	3097	3149	2986



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	90.6	1.4
10°-20°	255.8	3.8
20°-30°	377.7	5.7
30°-40°	440.7	6.6
40°-50°	442.6	6.6
50°-60°	388.5	5.8
60°-70°	289.5	4.3
70°-80°	165.5	2.5
80°-90°	51.4	0.8
90°-100°	100.0	1.5
100°-110°	295.3	4.4
110°-120°	500.2	7.5
120°-130°	658.3	9.9
130°-140°	737.7	11.1
140°-150°	723.0	10.8
150°-160°	607.3	9.1
160°-170°	403.7	6.1
170°-180°	141.3	2.1
0°-30°	724.0	10.9
0°-40°	1164.7	17.5
0°-60°	1995.9	29.9
0°-90°	2502.3	37.5
90°-120°	895.6	13.4
90°-150°	3014.6	45.2
90°-180°	4167.0	62.5
0°-180°	6669.1	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	960	960	960	960	960	
5°	959	957	950	956	956	91
15°	914	911	903	907	907	257
25°	830	826	816	817	815	382
35°	716	713	703	699	693	448
45°	587	583	574	566	563	452
55°	447	444	434	427	422	399
65°	302	300	292	285	282	299
75°	160	159	155	153	150	171
85°	42	42	42	42	40	47
90°	1	10	19	24	28	6
95°	76	78	90	97	100	81
105°	265	271	278	284	288	283
115°	501	505	508	507	506	495
125°	731	738	739	737	736	654
135°	951	957	959	958	954	732
145°	1152	1156	1160	1160	1156	720
155°	1318	1318	1319	1323	1318	607
165°	1433	1431	1432	1436	1429	404
175°	1490	1485	1485	1491	1484	141
180°	1493	1493	1493	1493	1493	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4
2.5°	962.8	962.4	962.0	961.6	961.2	960.3	959.0	957.6	956.3	954.9	956.3
5°	958.9	958.5	958.2	957.8	957.5	956.5	954.8	953.1	951.4	949.7	951.3
7.5°	950.0	949.7	949.4	949.0	948.7	947.6	945.7	943.9	942.0	940.2	941.6
10°	942.1	941.8	941.5	941.1	940.8	939.7	937.8	936.0	934.1	932.3	933.6
12.5°	932.4	931.8	931.2	930.6	930.0	928.8	927.1	925.4	923.6	921.9	923.0
15°	914.0	913.5	913.0	912.5	912.0	910.8	909.0	907.1	905.2	903.4	904.2
17.5°	892.9	892.2	891.4	890.7	889.9	888.6	886.7	884.7	882.8	880.9	881.9
20°	875.3	874.9	874.6	874.3	873.9	872.7	870.5	868.3	866.1	863.9	865.1
22.5°	857.6	857.0	856.4	855.8	855.2	853.9	851.8	849.8	847.7	845.6	846.4
25°	829.7	828.8	828.0	827.2	826.3	824.8	822.6	820.4	818.2	816.0	816.4
27.5°	797.0	796.5	796.0	795.5	795.0	793.6	791.3	789.1	786.8	784.6	784.6
30°	775.7	775.2	774.7	774.2	773.7	772.2	769.7	767.1	764.6	762.1	761.7
32.5°	752.6	751.9	751.1	750.3	749.5	748.0	745.8	743.5	741.2	739.0	738.4
35°	716.5	715.8	715.1	714.5	713.8	712.3	709.9	707.5	705.2	702.8	702.0
37.5°	678.9	678.1	677.3	676.4	675.6	674.0	671.8	669.6	667.3	665.1	663.9
40°	653.4	652.6	651.7	650.9	650.0	648.4	646.1	643.7	641.3	639.0	637.5
42.5°	626.1	625.4	624.6	623.9	623.2	621.7	619.3	617.0	614.6	612.2	610.9
45°	586.6	585.9	585.2	584.5	583.9	582.5	580.5	578.5	576.4	574.4	572.4
47.5°	544.0	544.0	544.1	544.1	544.1	542.9	540.5	538.1	535.7	533.2	531.2
50°	516.7	516.1	515.6	515.1	514.6	513.4	511.3	509.3	507.3	505.3	503.1
52.5°	488.7	488.3	488.0	487.6	487.2	485.9	483.8	481.6	479.5	477.3	475.4
55°	446.8	446.2	445.7	445.2	444.7	443.3	440.9	438.6	436.2	433.8	432.3
57.5°	402.5	402.3	402.0	401.7	401.5	400.3	398.3	396.3	394.3	392.4	390.4
60°	374.6	373.9	373.2	372.5	371.9	370.6	368.8	366.9	365.0	363.2	361.5
62.5°	345.4	344.9	344.3	343.8	343.2	342.2	340.6	339.0	337.4	335.8	334.0
65°	301.6	301.3	301.0	300.6	300.3	299.2	297.3	295.5	293.6	291.8	290.2
67.5°	259.2	258.5	257.8	257.1	256.4	255.4	254.0	252.6	251.2	249.8	248.5
70°	232.5	231.7	230.8	230.0	229.1	227.9	226.4	224.9	223.4	221.9	220.8
72.5°	203.3	202.7	202.2	201.6	201.0	200.2	199.3	198.3	197.3	196.3	195.2
75°	160.3	160.0	159.6	159.3	159.0	158.4	157.5	156.7	155.8	155.0	154.5
77.5°	120.7	120.5	120.4	120.2	120.1	119.8	119.3	118.9	118.4	117.9	117.6
80°	95.7	95.7	95.7	95.7	95.7	95.6	95.2	94.9	94.6	94.2	94.0
82.5°	73.9	73.6	73.3	73.0	72.8	72.6	72.5	72.5	72.4	72.3	72.0
85°	41.8	42.0	42.1	42.3	42.5	42.5	42.5	42.5	42.5	42.5	42.4
87.5°	16.6	17.1	17.5	17.9	18.3	18.6	18.8	19.1	19.3	19.5	19.8
90°	1.2	3.2	5.3	7.4	9.4	11.4	13.2	15.0	16.8	18.6	19.9
92.5°	28.1	29.6	31.0	32.5	33.9	35.7	38.0	40.2	42.4	44.6	46.3
95°	75.5	76.0	76.6	77.1	77.6	79.1	81.7	84.3	86.9	89.5	91.3
97.5°	125.5	125.7	125.9	126.1	126.3	128.2	131.8	135.3	138.9	142.5	144.2
100°	162.7	162.7	162.7	162.7	162.7	164.4	167.7	171.1	174.4	177.8	180.1
102.5°	202.7	203.7	204.7	205.8	206.8	208.2	209.9	211.6	213.3	215.0	217.5
105°	264.9	266.2	267.5	268.8	270.1	271.5	273.1	274.6	276.2	277.7	279.3
107.5°	333.7	335.0	336.3	337.6	338.9	340.1	341.3	342.5	343.7	344.9	345.7
110°	381.2	382.4	383.7	385.0	386.3	387.3	388.1	388.9	389.7	390.4	391.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	429.5	430.2	430.8	431.5	432.2	433.0	434.0	435.0	435.9	436.9	437.3
115°	500.8	501.9	502.9	503.9	505.0	505.7	506.3	506.8	507.3	507.8	507.6
117.5°	572.4	572.9	573.4	573.8	574.3	574.7	575.2	575.7	576.1	576.6	576.8
120°	617.0	618.3	619.6	620.9	622.2	623.0	623.2	623.5	623.8	624.0	624.0
122.5°	665.4	665.9	666.3	666.8	667.2	667.8	668.5	669.2	669.8	670.5	670.3
125°	730.9	732.5	734.0	735.6	737.1	738.0	738.3	738.5	738.8	739.1	738.5
127.5°	800.7	801.5	802.4	803.3	804.2	804.8	805.1	805.4	805.7	806.0	805.7
130°	842.5	843.8	845.1	846.4	847.6	848.6	849.1	849.6	850.1	850.6	850.4
132.5°	884.3	886.4	888.6	890.7	892.8	893.8	893.7	893.6	893.5	893.4	893.1
135°	950.6	952.1	953.7	955.2	956.8	957.7	957.9	958.2	958.4	958.7	958.7
137.5°	1012.8	1014.3	1015.8	1017.3	1018.8	1019.9	1020.4	1021.0	1021.6	1022.1	1022.4
140°	1052.8	1054.1	1055.4	1056.7	1058.0	1059.0	1059.8	1060.6	1061.3	1062.1	1062.6
142.5°	1092.8	1093.9	1095.0	1096.0	1097.1	1098.2	1099.1	1100.1	1101.1	1102.1	1102.4
145°	1151.6	1152.6	1153.7	1154.7	1155.7	1156.6	1157.4	1158.2	1158.9	1159.7	1159.7
147.5°	1206.0	1206.5	1207.1	1207.7	1208.2	1208.8	1209.5	1210.1	1210.7	1211.3	1211.9
150°	1242.2	1242.0	1241.7	1241.5	1241.2	1241.6	1242.6	1243.6	1244.7	1245.7	1245.7
152.5°	1272.0	1272.3	1272.7	1273.1	1273.4	1273.8	1274.2	1274.6	1275.1	1275.5	1276.1
155°	1317.8	1317.8	1317.8	1317.8	1317.8	1317.9	1318.2	1318.4	1318.7	1318.9	1320.0
157.5°	1358.7	1358.1	1357.5	1357.0	1356.4	1356.2	1356.5	1356.8	1357.0	1357.3	1358.3
160°	1382.8	1382.1	1381.3	1380.5	1379.7	1379.5	1379.7	1380.0	1380.3	1380.5	1381.5
162.5°	1404.2	1403.7	1403.1	1402.5	1401.9	1401.7	1401.7	1401.8	1401.8	1401.9	1403.1
165°	1432.8	1432.3	1431.8	1431.3	1430.7	1430.6	1430.9	1431.1	1431.4	1431.6	1432.7
167.5°	1457.0	1455.9	1454.9	1453.9	1452.8	1452.3	1452.3	1452.3	1452.3	1452.3	1453.9
170°	1470.0	1469.0	1467.9	1466.9	1465.9	1465.3	1465.3	1465.3	1465.3	1465.3	1466.9
172.5°	1479.3	1478.3	1477.2	1476.2	1475.2	1474.6	1474.6	1474.6	1474.6	1474.6	1476.2
175°	1489.7	1488.7	1487.7	1486.6	1485.6	1485.1	1485.1	1485.1	1485.1	1485.1	1486.6
177.5°	1495.1	1494.3	1493.4	1492.6	1491.8	1491.3	1491.1	1490.9	1490.6	1490.4	1491.7
180°	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	960.4	960.4	960.4	960.4	960.4	960.4	960.4	960.4
2.5°	957.6	959.0	960.3	960.9	960.8	960.6	960.5	960.4
5°	952.8	954.3	955.8	956.5	956.3	956.2	956.0	955.8
7.5°	943.1	944.6	946.1	946.8	946.6	946.4	946.3	946.1
10°	935.0	936.3	937.7	938.3	938.1	937.9	937.7	937.6
12.5°	924.1	925.2	926.2	926.8	926.7	926.7	926.7	926.6
15°	905.1	905.9	906.8	907.2	907.2	907.2	907.2	907.2
17.5°	883.0	884.0	885.1	885.2	884.3	883.5	882.7	881.8
20°	866.2	867.4	868.6	868.8	867.9	867.1	866.2	865.4
22.5°	847.2	848.0	848.8	848.9	848.3	847.7	847.1	846.6
25°	816.7	817.0	817.4	817.3	816.8	816.3	815.8	815.3
27.5°	784.7	784.8	784.8	784.6	784.1	783.6	783.1	782.6
30°	761.4	761.1	760.7	760.3	759.8	759.3	758.8	758.3
32.5°	737.8	737.1	736.5	735.8	734.9	734.0	733.0	732.1
35°	701.1	700.3	699.4	698.3	697.0	695.6	694.3	692.9
37.5°	662.6	661.4	660.1	659.1	658.3	657.6	656.8	656.0
40°	635.9	634.4	632.9	631.9	631.4	630.9	630.4	629.9
42.5°	609.5	608.1	606.7	605.6	604.8	604.1	603.3	602.5
45°	570.3	568.3	566.3	565.0	564.5	564.0	563.5	563.0
47.5°	529.1	527.0	525.0	523.4	522.2	521.0	519.8	518.6
50°	500.9	498.7	496.5	494.8	493.6	492.4	491.2	490.1
52.5°	473.4	471.5	469.6	468.0	466.7	465.3	464.0	462.7
55°	430.8	429.3	427.8	426.4	425.2	424.0	422.9	421.7
57.5°	388.4	386.5	384.5	383.2	382.6	381.9	381.3	380.7
60°	359.8	358.1	356.4	355.0	353.8	352.6	351.4	350.3
62.5°	332.2	330.4	328.5	327.2	326.3	325.3	324.4	323.5
65°	288.7	287.2	285.7	284.6	283.9	283.2	282.6	281.9
67.5°	247.3	246.0	244.7	243.8	243.4	243.0	242.6	242.2
70°	219.8	218.8	217.8	217.0	216.3	215.6	214.9	214.3
72.5°	194.0	192.9	191.7	190.8	190.1	189.5	188.8	188.1
75°	154.0	153.5	153.0	152.4	151.7	151.0	150.4	149.7
77.5°	117.3	117.0	116.7	116.3	115.8	115.4	114.9	114.4
80°	93.9	93.7	93.5	93.3	92.9	92.6	92.3	91.9
82.5°	71.7	71.4	71.1	70.9	70.9	70.8	70.7	70.7
85°	42.2	42.0	41.9	41.6	41.3	40.9	40.6	40.3
87.5°	20.0	20.3	20.6	20.6	20.5	20.4	20.3	20.2
90°	21.2	22.5	23.8	24.8	25.6	26.3	27.1	27.9
92.5°	48.0	49.7	51.4	52.6	53.1	53.7	54.3	54.8
95°	93.1	94.9	96.7	97.9	98.4	98.9	99.4	99.9
97.5°	145.9	147.6	149.3	150.3	150.6	150.9	151.2	151.5
100°	182.4	184.8	187.1	188.5	189.0	189.5	190.1	190.6
102.5°	220.0	222.6	225.1	226.7	227.5	228.2	228.9	229.6
105°	280.8	282.4	283.9	285.1	285.9	286.6	287.4	288.2
107.5°	346.4	347.2	348.0	348.4	348.3	348.3	348.2	348.1
110°	392.0	392.8	393.5	393.8	393.5	393.3	393.0	392.8



TEST NUMBER: P333203

CATALOG NUMBER: S125DIP-S610D1205U835-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	437.7	438.0	438.4	438.3	437.9	437.4	436.9	436.5
115°	507.3	507.0	506.8	506.5	506.3	506.0	505.7	505.5
117.5°	577.0	577.2	577.4	577.0	576.0	575.0	573.9	572.9
120°	624.0	624.0	624.0	623.5	622.5	621.4	620.4	619.4
122.5°	670.1	669.9	669.7	669.2	668.3	667.5	666.7	665.9
125°	738.0	737.5	737.0	736.6	736.4	736.1	735.8	735.6
127.5°	805.5	805.2	805.0	804.6	804.1	803.5	803.0	802.5
130°	850.1	849.8	849.6	849.2	848.7	848.2	847.6	847.1
132.5°	892.9	892.6	892.3	891.9	891.1	890.4	889.7	889.0
135°	958.7	958.7	958.7	958.2	957.1	956.1	955.1	954.0
137.5°	1022.8	1023.1	1023.4	1022.9	1021.6	1020.3	1019.0	1017.7
140°	1063.1	1063.7	1064.2	1063.8	1062.5	1061.2	1059.9	1058.6
142.5°	1102.7	1103.0	1103.3	1102.8	1101.5	1100.3	1099.0	1097.7
145°	1159.7	1159.7	1159.7	1159.3	1158.6	1157.8	1157.0	1156.2
147.5°	1212.6	1213.2	1213.8	1213.2	1211.5	1209.7	1208.0	1206.2
150°	1245.7	1245.7	1245.7	1245.5	1244.9	1244.4	1243.9	1243.4
152.5°	1276.7	1277.3	1277.9	1277.8	1276.9	1275.9	1275.0	1274.1
155°	1321.0	1322.0	1323.1	1322.9	1321.6	1320.3	1319.1	1317.8
157.5°	1359.3	1360.4	1361.4	1361.1	1359.4	1357.7	1356.0	1354.3
160°	1382.6	1383.6	1384.6	1384.5	1383.2	1381.9	1380.6	1379.4
162.5°	1404.4	1405.6	1406.9	1406.7	1405.2	1403.7	1402.2	1400.7
165°	1433.7	1434.7	1435.8	1435.5	1434.0	1432.4	1430.9	1429.3
167.5°	1455.4	1457.0	1458.5	1458.5	1456.9	1455.3	1453.7	1452.1
170°	1468.4	1470.0	1471.5	1471.4	1469.6	1467.8	1466.0	1464.2
172.5°	1477.7	1479.3	1480.8	1480.8	1479.2	1477.6	1476.0	1474.4
175°	1488.2	1489.7	1491.3	1491.2	1489.4	1487.6	1485.7	1483.9
177.5°	1492.9	1494.2	1495.4	1495.3	1493.9	1492.4	1491.0	1489.5
180°	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2	1493.2

(END OF REPORT)