

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: P333193-840

Luminaire Tested: **S125DIP-S610D1035U840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333193-840
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-S610D1035U840-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6703.5 lumens
Efficiency: N/A
Efficacy: 150.6 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

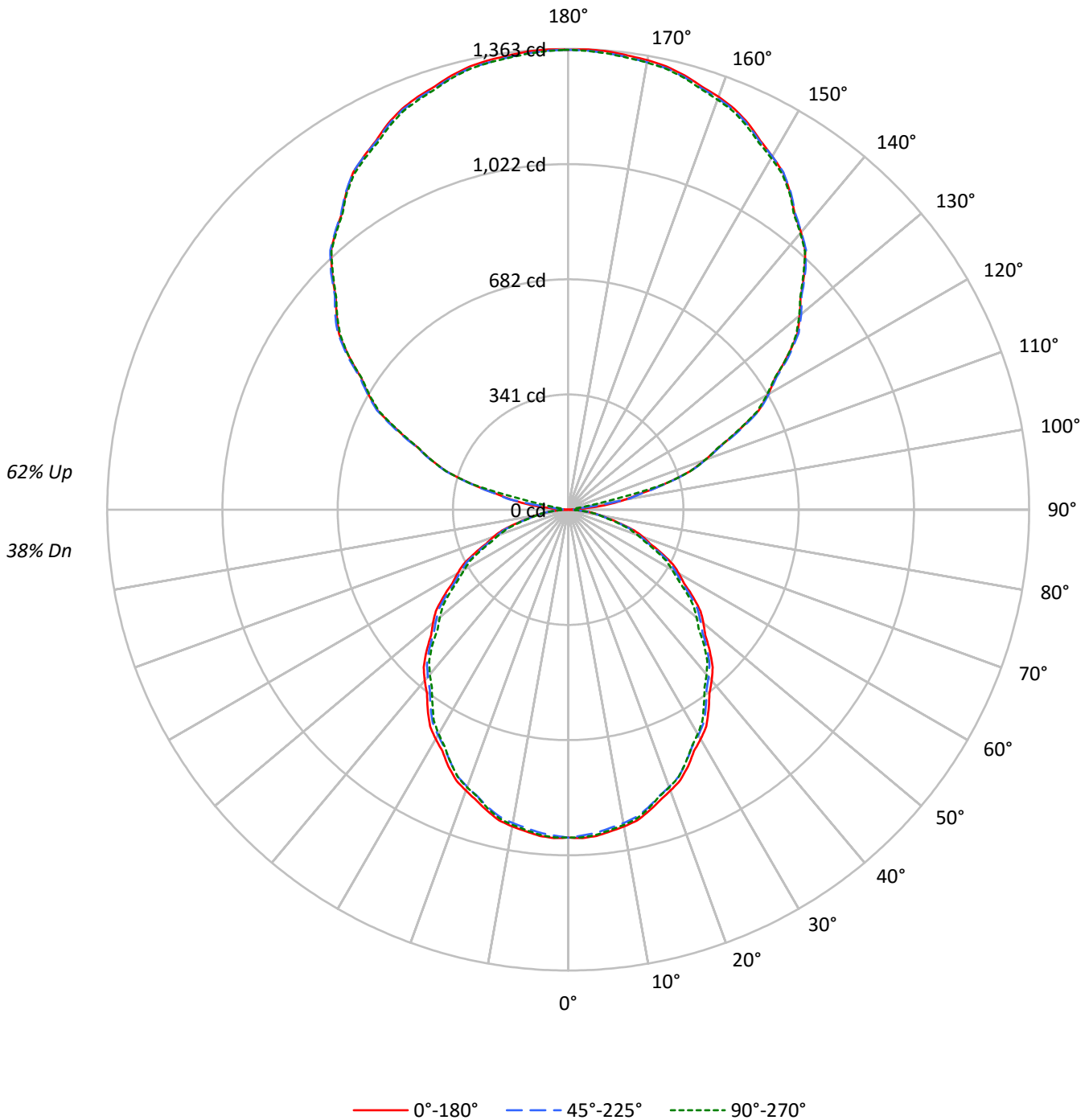
Input Watts (W): 44.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	104	104	104	104	95	95	95	95	76	76	76	60	60	60	45	45	45	38
1	95	91	87	83	86	82	79	76	67	65	63	53	51	50	39	39	38	32
2	86	79	73	68	78	72	67	62	59	55	52	46	44	41	35	33	32	26
3	79	70	62	57	71	63	57	52	52	47	43	41	38	35	31	29	27	22
4	72	61	54	48	65	56	49	44	46	41	37	36	33	30	27	25	23	19
5	66	55	47	41	60	50	43	38	41	36	32	33	29	26	25	22	20	17
6	61	49	41	35	55	45	38	33	37	32	28	29	26	23	22	20	18	15
7	56	44	36	31	51	40	33	29	33	28	24	27	23	20	20	18	16	13
8	52	40	32	27	47	37	30	25	30	25	21	24	21	18	19	16	14	12
9	48	36	29	24	44	33	27	22	28	23	19	22	19	16	17	15	13	10
10	45	33	26	21	41	31	24	20	25	21	17	21	17	14	16	13	12	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6264	6264	6264
5°	6278	6218	6257
10°	6239	6174	6209
15°	6171	6100	6125
20°	6075	5996	6006
25°	5971	5872	5867
30°	5842	5739	5711
35°	5705	5595	5517
40°	5563	5440	5363
45°	5411	5298	5193
50°	5243	5127	4972
55°	5080	4933	4796
60°	4886	4738	4570
65°	4655	4504	4351
70°	4434	4232	4086
75°	4040	3905	3773
80°	3593	3537	3451
85°	3127	3179	3016



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	91.4	1.4
10°-20°	258.3	3.9
20°-30°	381.4	5.7
30°-40°	445.0	6.6
40°-50°	447.0	6.7
50°-60°	392.4	5.9
60°-70°	292.4	4.4
70°-80°	167.2	2.5
80°-90°	51.4	0.8
90°-100°	49.4	0.7
100°-110°	304.6	4.5
110°-120°	552.5	8.2
120°-130°	709.1	10.6
130°-140°	762.7	11.4
140°-150°	715.9	10.7
150°-160°	579.1	8.6
160°-170°	374.5	5.6
170°-180°	129.2	1.9
0°-30°	731.2	10.9
0°-40°	1176.2	17.5
0°-60°	2015.6	30.1
0°-90°	2526.5	37.7
90°-120°	906.6	13.5
90°-150°	3094.2	46.2
90°-180°	4177.0	62.3
0°-180°	6703.5	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	970	970	970	970	970	
5°	968	966	959	966	965	92
15°	923	920	912	916	916	260
25°	838	834	824	825	823	385
35°	724	720	710	706	700	452
45°	592	589	580	571	569	456
55°	451	448	438	431	426	403
65°	305	303	295	288	285	302
75°	162	160	156	154	151	173
85°	42	43	43	42	41	47
90°	1	9	16	21	24	5
95°	58	52	16	21	21	73
105°	296	300	300	300	299	314
115°	557	561	563	559	553	552
125°	792	798	799	795	792	707
135°	987	993	991	989	983	761
145°	1144	1146	1146	1147	1142	715
155°	1260	1255	1256	1259	1251	580
165°	1330	1324	1325	1330	1323	376
175°	1360	1355	1355	1362	1354	129
180°	1360	1360	1360	1360	1360	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9
2.5°	972.3	971.9	971.5	971.1	970.7	969.8	968.5	967.0	965.7	964.3	965.7
5°	968.4	968.0	967.7	967.2	966.9	965.9	964.2	962.5	960.8	959.1	960.7
7.5°	959.4	959.1	958.8	958.4	958.1	956.9	955.0	953.2	951.3	949.5	950.9
10°	951.4	951.1	950.8	950.4	950.1	949.0	947.1	945.2	943.3	941.5	942.8
12.5°	941.6	941.0	940.4	939.8	939.2	938.0	936.2	934.5	932.7	931.0	932.1
15°	923.0	922.5	922.0	921.5	921.0	919.8	918.0	916.0	914.1	912.3	913.1
17.5°	901.7	901.0	900.2	899.5	898.7	897.4	895.4	893.4	891.5	889.6	890.6
20°	883.9	883.5	883.2	882.9	882.5	881.3	879.1	876.9	874.6	872.4	873.6
22.5°	866.1	865.5	864.8	864.2	863.6	862.3	860.2	858.2	856.1	853.9	854.7
25°	837.9	837.0	836.2	835.4	834.5	832.9	830.7	828.5	826.3	824.0	824.5
27.5°	804.9	804.4	803.9	803.3	802.8	801.4	799.1	796.9	794.6	792.3	792.3
30°	783.4	782.8	782.3	781.8	781.3	779.8	777.3	774.7	772.1	769.6	769.2
32.5°	760.0	759.3	758.5	757.7	756.9	755.4	753.2	750.8	748.5	746.3	745.7
35°	723.6	722.9	722.2	721.5	720.8	719.3	716.9	714.5	712.2	709.7	708.9
37.5°	685.6	684.8	684.0	683.1	682.3	680.6	678.4	676.2	673.9	671.7	670.4
40°	659.8	659.0	658.1	657.3	656.4	654.8	652.5	650.1	647.6	645.3	643.8
42.5°	632.3	631.6	630.8	630.1	629.3	627.8	625.4	623.1	620.7	618.2	616.9
45°	592.4	591.7	591.0	590.3	589.7	588.2	586.2	584.2	582.1	580.1	578.0
47.5°	549.4	549.4	549.5	549.5	549.5	548.3	545.8	543.4	541.0	538.5	536.4
50°	521.8	521.2	520.7	520.2	519.7	518.5	516.3	514.3	512.3	510.3	508.1
52.5°	493.5	493.1	492.8	492.4	492.0	490.7	488.6	486.4	484.2	482.0	480.1
55°	451.2	450.6	450.1	449.6	449.1	447.7	445.2	442.9	440.5	438.1	436.6
57.5°	406.5	406.3	406.0	405.7	405.5	404.2	402.2	400.2	398.2	396.3	394.3
60°	378.3	377.6	376.9	376.2	375.6	374.3	372.4	370.5	368.6	366.8	365.1
62.5°	348.8	348.3	347.7	347.2	346.6	345.6	344.0	342.3	340.7	339.1	337.3
65°	304.6	304.3	304.0	303.6	303.3	302.2	300.2	298.4	296.5	294.7	293.1
67.5°	261.8	261.1	260.3	259.6	258.9	257.9	256.5	255.1	253.7	252.3	251.0
70°	234.8	234.0	233.1	232.3	231.4	230.1	228.6	227.1	225.6	224.1	223.0
72.5°	205.3	204.7	204.2	203.6	203.0	202.2	201.3	200.3	199.2	198.2	197.1
75°	161.9	161.6	161.2	160.9	160.6	160.0	159.1	158.2	157.3	156.5	156.0
77.5°	121.9	121.7	121.6	121.4	121.3	121.0	120.5	120.1	119.6	119.1	118.8
80°	96.6	96.6	96.6	96.6	96.6	96.5	96.1	95.8	95.5	95.1	94.9
82.5°	74.6	74.3	74.0	73.7	73.5	73.3	73.2	73.2	73.1	73.0	72.7
85°	42.2	42.4	42.5	42.7	42.9	42.9	42.9	42.9	42.9	42.9	42.8
87.5°	16.8	17.2	17.5	17.9	18.2	18.5	18.7	18.8	19.0	19.2	19.4
90°	1.0	2.8	4.5	6.4	8.2	9.9	11.4	13.0	14.5	16.2	17.3
92.5°	15.6	14.2	13.0	11.7	10.5	10.6	11.9	13.3	14.7	16.2	17.3
95°	57.5	56.8	56.1	55.4	54.8	50.2	41.7	33.1	24.6	16.2	17.3
97.5°	120.0	121.2	122.4	123.6	124.8	117.0	100.2	83.3	66.4	49.6	43.3
100°	168.3	169.1	169.8	170.4	171.1	171.9	172.8	173.7	174.5	175.4	142.1
102.5°	217.6	218.4	219.3	220.2	221.0	221.7	222.3	222.8	223.3	223.9	217.5
105°	296.4	297.3	298.2	299.1	300.0	300.4	300.4	300.4	300.4	300.4	300.4
107.5°	378.3	378.3	378.3	378.3	378.3	378.5	379.0	379.4	379.9	380.3	380.4
110°	431.5	431.5	431.5	431.5	431.5	431.8	432.2	432.7	433.1	433.5	432.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	481.6	482.1	482.6	483.2	483.7	484.1	484.4	484.6	484.9	485.2	484.3
115°	556.6	557.7	558.9	560.0	561.1	561.8	562.0	562.2	562.4	562.6	561.8
117.5°	634.2	634.2	634.1	634.1	634.1	634.5	635.3	636.1	637.0	637.8	636.7
120°	682.7	682.4	682.2	682.0	681.8	682.0	682.7	683.3	684.0	684.7	684.2
122.5°	725.4	726.2	727.1	727.9	728.8	729.3	729.7	730.0	730.3	730.6	730.1
125°	791.5	793.0	794.7	796.3	797.8	798.6	798.6	798.6	798.6	798.6	797.7
127.5°	854.6	855.8	856.9	858.0	859.1	859.6	859.5	859.4	859.2	859.1	858.6
130°	893.3	894.5	895.6	896.8	897.9	898.5	898.8	899.0	899.2	899.4	898.8
132.5°	932.1	933.4	934.7	935.9	937.3	937.7	937.2	936.8	936.2	935.7	935.5
135°	987.1	988.5	989.9	991.2	992.5	993.0	992.5	992.1	991.6	991.2	990.7
137.5°	1037.7	1038.9	1040.1	1041.3	1042.4	1042.8	1042.4	1042.0	1041.6	1041.2	1041.3
140°	1070.9	1071.3	1071.8	1072.2	1072.6	1072.8	1072.5	1072.3	1072.1	1071.9	1072.3
142.5°	1100.7	1101.0	1101.3	1101.5	1101.8	1102.1	1102.4	1102.7	1103.0	1103.3	1103.4
145°	1144.5	1144.9	1145.3	1145.8	1146.2	1146.5	1146.5	1146.5	1146.5	1146.5	1146.7
147.5°	1182.8	1182.7	1182.6	1182.5	1182.3	1182.5	1182.8	1183.1	1183.3	1183.6	1183.9
150°	1207.0	1206.5	1206.1	1205.6	1205.2	1205.2	1205.6	1206.1	1206.5	1207.0	1207.4
152.5°	1230.3	1229.4	1228.4	1227.4	1226.4	1226.2	1226.6	1227.0	1227.5	1227.9	1228.4
155°	1260.4	1259.1	1257.7	1256.4	1255.1	1254.6	1255.1	1255.5	1255.9	1256.4	1257.1
157.5°	1283.5	1282.7	1282.0	1281.2	1280.4	1280.0	1280.0	1280.1	1280.1	1280.2	1280.9
160°	1299.7	1298.4	1297.1	1295.7	1294.3	1293.7	1294.0	1294.2	1294.4	1294.6	1295.6
162.5°	1312.6	1311.3	1309.9	1308.6	1307.3	1306.7	1306.9	1307.2	1307.4	1307.6	1308.9
165°	1330.0	1328.6	1327.3	1326.0	1324.6	1324.0	1324.2	1324.4	1324.7	1324.9	1326.3
167.5°	1342.9	1341.5	1340.1	1338.7	1337.4	1336.8	1337.0	1337.2	1337.4	1337.7	1339.3
170°	1350.1	1348.6	1347.0	1345.4	1343.8	1343.2	1343.4	1343.6	1343.8	1344.1	1345.8
172.5°	1354.9	1353.4	1351.8	1350.3	1348.7	1348.2	1348.5	1348.9	1349.3	1349.7	1351.3
175°	1360.2	1358.9	1357.6	1356.1	1354.8	1354.3	1354.5	1354.7	1354.9	1355.1	1357.0
177.5°	1362.6	1361.6	1360.5	1359.4	1358.4	1357.9	1358.1	1358.3	1358.5	1358.6	1359.9
180°	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	969.9	969.9	969.9	969.9	969.9	969.9	969.9	969.9
2.5°	967.0	968.5	969.8	970.4	970.3	970.1	970.0	969.9
5°	962.2	963.7	965.2	965.9	965.7	965.6	965.4	965.2
7.5°	952.4	953.9	955.4	956.1	955.9	955.7	955.6	955.4
10°	944.2	945.5	947.0	947.6	947.4	947.2	947.0	946.8
12.5°	933.2	934.3	935.3	935.9	935.8	935.8	935.8	935.7
15°	914.0	914.8	915.7	916.1	916.1	916.1	916.1	916.1
17.5°	891.7	892.7	893.8	893.9	893.0	892.2	891.4	890.5
20°	874.7	876.0	877.2	877.4	876.5	875.7	874.7	873.9
22.5°	855.6	856.4	857.2	857.3	856.7	856.1	855.5	855.0
25°	824.8	825.1	825.5	825.4	824.9	824.4	823.8	823.3
27.5°	792.4	792.5	792.5	792.3	791.8	791.3	790.8	790.3
30°	768.9	768.6	768.2	767.8	767.3	766.8	766.3	765.8
32.5°	745.1	744.4	743.8	743.1	742.1	741.2	740.2	739.3
35°	708.0	707.2	706.3	705.2	703.9	702.5	701.1	699.7
37.5°	669.1	667.9	666.6	665.6	664.8	664.1	663.3	662.5
40°	642.2	640.7	639.1	638.1	637.6	637.1	636.6	636.1
42.5°	615.5	614.1	612.7	611.6	610.8	610.1	609.3	608.4
45°	575.9	573.9	571.9	570.6	570.1	569.6	569.1	568.6
47.5°	534.3	532.2	530.2	528.6	527.4	526.1	524.9	523.7
50°	505.8	503.6	501.4	499.7	498.5	497.3	496.0	494.9
52.5°	478.1	476.2	474.2	472.6	471.3	469.9	468.6	467.3
55°	435.0	433.5	432.0	430.6	429.4	428.2	427.1	425.9
57.5°	392.2	390.3	388.3	387.0	386.4	385.7	385.1	384.5
60°	363.3	361.6	359.9	358.5	357.3	356.1	354.9	353.8
62.5°	335.5	333.7	331.7	330.4	329.5	328.5	327.6	326.7
65°	291.5	290.0	288.5	287.4	286.7	286.0	285.4	284.7
67.5°	249.7	248.4	247.1	246.2	245.8	245.4	245.0	244.6
70°	222.0	221.0	219.9	219.1	218.4	217.7	217.0	216.4
72.5°	195.9	194.8	193.6	192.7	192.0	191.4	190.7	190.0
75°	155.5	155.0	154.5	153.9	153.2	152.5	151.9	151.2
77.5°	118.5	118.2	117.9	117.4	116.9	116.5	116.0	115.5
80°	94.8	94.6	94.4	94.2	93.8	93.5	93.2	92.8
82.5°	72.4	72.1	71.8	71.6	71.6	71.5	71.4	71.4
85°	42.6	42.4	42.3	42.0	41.7	41.3	41.0	40.7
87.5°	19.6	19.9	20.1	20.1	20.0	19.9	19.7	19.6
90°	18.4	19.5	20.6	21.5	22.2	22.8	23.5	24.2
92.5°	18.4	19.5	20.6	21.3	21.6	21.9	22.3	22.6
95°	18.4	19.5	20.6	21.2	21.2	21.2	21.2	21.2
97.5°	37.0	30.7	24.3	21.2	21.2	21.2	21.2	21.2
100°	108.7	75.3	41.9	24.7	23.8	22.9	22.1	21.2
102.5°	211.2	204.9	198.5	187.8	172.6	157.3	142.1	126.8
105°	300.4	300.4	300.4	300.3	300.1	299.9	299.7	299.4
107.5°	380.4	380.5	380.5	380.2	379.5	378.9	378.2	377.5
110°	432.2	431.5	430.9	430.7	430.9	431.1	431.3	431.5



TEST NUMBER: P333193-840

CATALOG NUMBER: S125DIP-S610D1035U840-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	483.5	482.6	481.8	481.2	480.9	480.6	480.3	480.0
115°	560.9	560.0	559.1	558.0	556.6	555.2	553.9	552.6
117.5°	635.5	634.4	633.2	632.3	631.8	631.2	630.6	630.0
120°	683.8	683.3	682.9	682.1	681.0	679.8	678.7	677.6
122.5°	729.7	729.3	728.8	727.9	726.7	725.4	724.1	722.8
125°	796.8	795.9	795.0	794.3	793.6	792.8	792.2	791.5
127.5°	858.1	857.6	857.1	856.1	854.3	852.7	851.1	849.4
130°	898.1	897.4	896.8	895.9	894.7	893.6	892.5	891.3
132.5°	935.4	935.3	935.1	934.5	933.4	932.3	931.2	930.1
135°	990.3	989.9	989.4	988.5	987.1	985.8	984.4	983.1
137.5°	1041.4	1041.5	1041.6	1041.0	1039.9	1038.6	1037.5	1036.3
140°	1072.8	1073.2	1073.6	1073.2	1071.9	1070.5	1069.1	1067.8
142.5°	1103.5	1103.6	1103.7	1103.1	1101.7	1100.3	1099.0	1097.6
145°	1146.9	1147.1	1147.3	1146.8	1145.5	1144.1	1142.8	1141.5
147.5°	1184.1	1184.4	1184.7	1184.0	1182.3	1180.7	1179.1	1177.5
150°	1207.9	1208.3	1208.7	1208.1	1206.3	1204.5	1202.6	1200.9
152.5°	1228.8	1229.3	1229.7	1229.1	1227.5	1225.9	1224.3	1222.6
155°	1257.7	1258.4	1259.1	1258.5	1256.7	1254.9	1253.1	1251.3
157.5°	1281.6	1282.3	1283.0	1282.5	1280.7	1278.9	1277.1	1275.4
160°	1296.5	1297.4	1298.3	1297.8	1296.1	1294.2	1292.4	1290.6
162.5°	1310.1	1311.3	1312.6	1312.2	1310.3	1308.3	1306.4	1304.3
165°	1327.6	1329.0	1330.3	1330.1	1328.3	1326.5	1324.7	1322.9
167.5°	1340.9	1342.5	1344.1	1343.9	1341.9	1339.9	1337.9	1335.8
170°	1347.7	1349.5	1351.3	1351.1	1349.1	1347.2	1345.1	1343.1
172.5°	1352.9	1354.5	1356.1	1355.9	1353.9	1351.9	1349.9	1348.0
175°	1358.8	1360.6	1362.3	1362.2	1360.2	1358.2	1356.1	1354.1
177.5°	1361.1	1362.4	1363.6	1363.5	1362.1	1360.7	1359.3	1357.8
180°	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2

(END OF REPORT)