

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

Luminaire Tested: **S125DIP-S610D1035U835-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333193
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-S610D1035U835-4F0-1E-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: 6638.0 lumens
Efficiency: N/A
Efficacy: 149.2 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

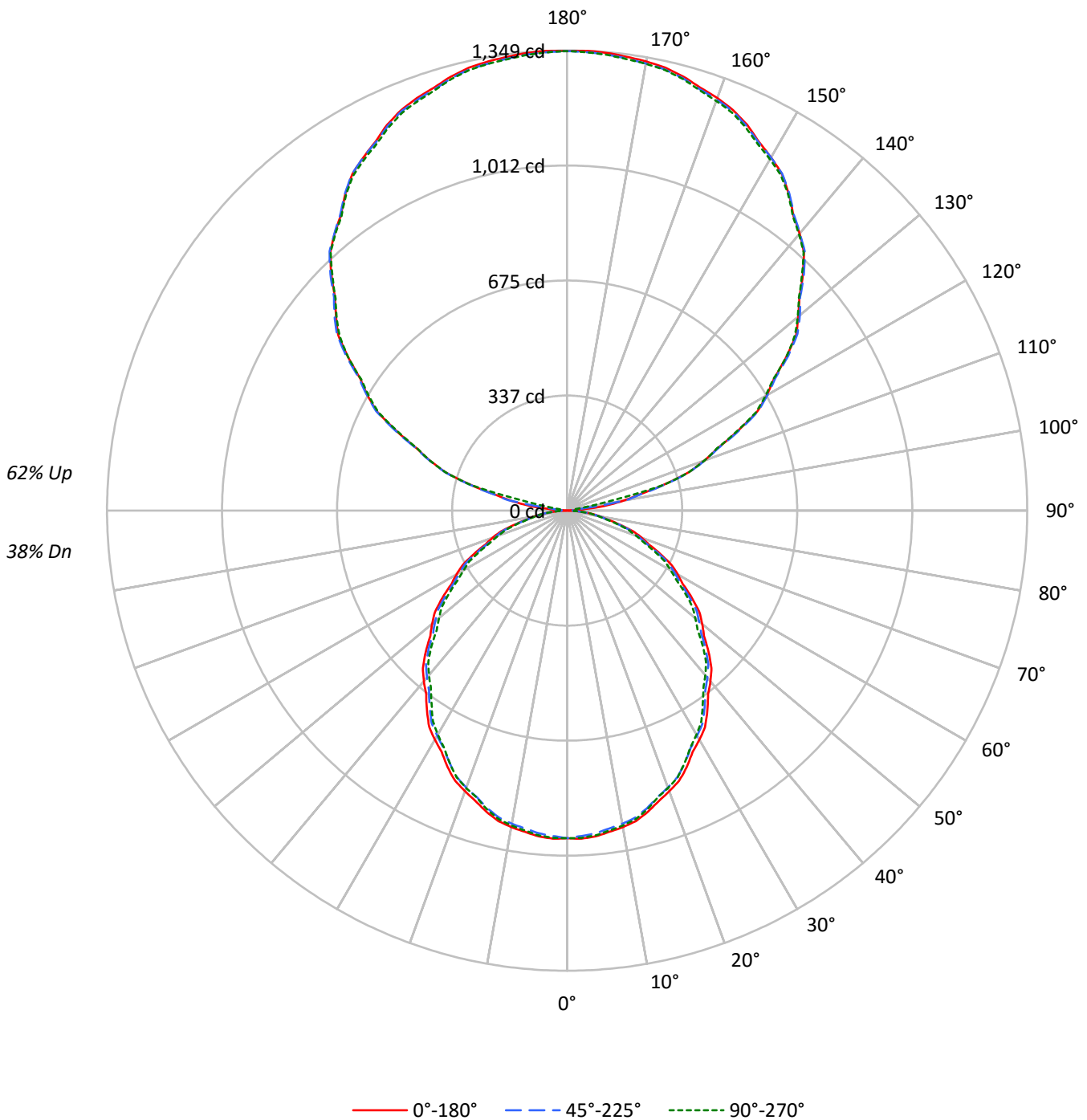
Input Watts (W): 44.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	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	3.9
20°-30°	377.7	5.7
30°-40°	440.7	6.6
40°-50°	442.6	6.7
50°-60°	388.5	5.9
60°-70°	289.5	4.4
70°-80°	165.5	2.5
80°-90°	51.0	0.8
90°-100°	49.0	0.7
100°-110°	301.7	4.5
110°-120°	547.1	8.2
120°-130°	702.2	10.6
130°-140°	755.2	11.4
140°-150°	708.9	10.7
150°-160°	573.4	8.6
160°-170°	370.9	5.6
170°-180°	127.9	1.9
0°-30°	724.0	10.9
0°-40°	1164.7	17.5
0°-60°	1995.9	30.1
0°-90°	2501.8	37.7
90°-120°	897.7	13.5
90°-150°	3064.0	46.2
90°-180°	4136.0	62.3
0°-180°	6638.0	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	9	16	21	24	5
95°	57	52	16	21	21	73
105°	294	297	298	297	296	311
115°	551	556	557	553	547	546
125°	784	790	791	787	784	700
135°	978	983	982	979	974	753
145°	1133	1135	1135	1136	1130	708
155°	1248	1243	1244	1246	1239	575
165°	1317	1311	1312	1317	1310	372
175°	1347	1341	1342	1349	1341	128
180°	1347	1347	1347	1347	1347	



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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	17.0	17.3	17.7	18.0	18.3	18.5	18.6	18.8	19.0	19.2
90°	1.0	2.8	4.5	6.3	8.1	9.8	11.3	12.9	14.4	16.0	17.1
92.5°	15.4	14.1	12.9	11.6	10.4	10.5	11.8	13.2	14.6	16.0	17.1
95°	56.9	56.2	55.6	54.9	54.3	49.7	41.3	32.8	24.4	16.0	17.1
97.5°	118.8	120.0	121.2	122.4	123.6	115.9	99.2	82.5	65.8	49.1	42.9
100°	166.7	167.4	168.1	168.7	169.4	170.2	171.1	172.0	172.8	173.7	140.7
102.5°	215.5	216.3	217.2	218.0	218.8	219.5	220.1	220.6	221.1	221.7	215.4
105°	293.5	294.4	295.3	296.2	297.1	297.5	297.5	297.5	297.5	297.5	297.5
107.5°	374.6	374.6	374.6	374.6	374.6	374.8	375.3	375.7	376.2	376.6	376.7
110°	427.3	427.3	427.3	427.3	427.3	427.6	428.0	428.5	428.9	429.3	428.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	476.9	477.4	477.9	478.5	479.0	479.4	479.7	479.9	480.2	480.5	479.6
115°	551.2	552.3	553.4	554.5	555.6	556.3	556.5	556.7	556.9	557.1	556.3
117.5°	628.0	628.0	627.9	627.9	627.9	628.3	629.1	629.9	630.8	631.6	630.5
120°	676.0	675.7	675.5	675.3	675.1	675.3	676.0	676.6	677.3	678.0	677.5
122.5°	718.3	719.1	720.0	720.8	721.7	722.2	722.6	722.9	723.2	723.5	723.0
125°	783.8	785.3	786.9	788.5	790.0	790.8	790.8	790.8	790.8	790.8	789.9
127.5°	846.3	847.4	848.5	849.6	850.7	851.2	851.1	851.0	850.8	850.7	850.2
130°	884.6	885.8	886.9	888.0	889.1	889.7	890.0	890.2	890.4	890.6	890.0
132.5°	923.0	924.3	925.6	926.8	928.1	928.5	928.0	927.6	927.1	926.6	926.4
135°	977.5	978.8	980.2	981.5	982.8	983.3	982.8	982.4	981.9	981.5	981.0
137.5°	1027.6	1028.8	1029.9	1031.1	1032.2	1032.6	1032.2	1031.8	1031.4	1031.0	1031.1
140°	1060.4	1060.8	1061.3	1061.7	1062.1	1062.3	1062.0	1061.8	1061.6	1061.4	1061.8
142.5°	1089.9	1090.2	1090.5	1090.7	1091.0	1091.3	1091.6	1091.9	1092.2	1092.5	1092.6
145°	1133.3	1133.7	1134.1	1134.6	1135.0	1135.3	1135.3	1135.3	1135.3	1135.3	1135.5
147.5°	1171.2	1171.1	1171.0	1170.9	1170.8	1170.9	1171.2	1171.5	1171.7	1172.0	1172.3
150°	1195.2	1194.7	1194.3	1193.8	1193.4	1193.4	1193.8	1194.3	1194.7	1195.2	1195.6
152.5°	1218.3	1217.4	1216.4	1215.4	1214.4	1214.2	1214.6	1215.0	1215.5	1215.9	1216.4
155°	1248.1	1246.8	1245.4	1244.1	1242.8	1242.3	1242.8	1243.2	1243.6	1244.1	1244.8
157.5°	1271.0	1270.2	1269.5	1268.7	1267.9	1267.5	1267.5	1267.6	1267.6	1267.7	1268.4
160°	1287.0	1285.7	1284.4	1283.0	1281.7	1281.1	1281.4	1281.6	1281.8	1282.0	1282.9
162.5°	1299.8	1298.5	1297.1	1295.8	1294.5	1293.9	1294.1	1294.4	1294.6	1294.8	1296.1
165°	1317.0	1315.6	1314.3	1313.0	1311.7	1311.1	1311.3	1311.5	1311.8	1312.0	1313.3
167.5°	1329.8	1328.4	1327.0	1325.6	1324.3	1323.7	1323.9	1324.1	1324.3	1324.6	1326.2
170°	1336.9	1335.4	1333.8	1332.3	1330.7	1330.1	1330.3	1330.5	1330.7	1331.0	1332.7
172.5°	1341.7	1340.2	1338.6	1337.1	1335.5	1335.0	1335.3	1335.7	1336.1	1336.5	1338.1
175°	1346.9	1345.6	1344.3	1342.9	1341.6	1341.1	1341.3	1341.5	1341.7	1341.9	1343.7
177.5°	1349.3	1348.3	1347.2	1346.1	1345.1	1344.6	1344.8	1345.0	1345.2	1345.3	1346.6
180°	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9



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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°	19.4	19.7	19.9	19.9	19.8	19.7	19.5	19.4
90°	18.2	19.3	20.4	21.3	22.0	22.6	23.3	24.0
92.5°	18.2	19.3	20.4	21.1	21.4	21.7	22.1	22.4
95°	18.2	19.3	20.4	21.0	21.0	21.0	21.0	21.0
97.5°	36.6	30.4	24.1	21.0	21.0	21.0	21.0	21.0
100°	107.6	74.6	41.5	24.5	23.6	22.7	21.9	21.0
102.5°	209.1	202.9	196.6	186.0	170.9	155.8	140.7	125.6
105°	297.5	297.5	297.5	297.4	297.2	297.0	296.8	296.5
107.5°	376.7	376.8	376.8	376.5	375.8	375.2	374.5	373.8
110°	428.0	427.3	426.7	426.5	426.7	426.9	427.1	427.3



TEST NUMBER: P333193

CATALOG NUMBER: S125DIP-S610D1035U835-4F0-1E-UDD-F

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	478.8	477.9	477.1	476.5	476.2	475.9	475.6	475.3
115°	555.4	554.5	553.6	552.5	551.2	549.8	548.5	547.2
117.5°	629.3	628.2	627.0	626.1	625.6	625.0	624.4	623.8
120°	677.1	676.6	676.2	675.4	674.3	673.2	672.1	671.0
122.5°	722.6	722.2	721.7	720.8	719.6	718.3	717.0	715.7
125°	789.0	788.1	787.2	786.5	785.8	785.1	784.5	783.8
127.5°	849.7	849.2	848.7	847.7	846.0	844.4	842.8	841.1
130°	889.3	888.6	888.0	887.1	886.0	884.9	883.8	882.6
132.5°	926.3	926.2	926.0	925.4	924.3	923.2	922.1	921.0
135°	980.6	980.2	979.7	978.8	977.5	976.2	974.8	973.5
137.5°	1031.2	1031.3	1031.4	1030.8	1029.7	1028.5	1027.4	1026.2
140°	1062.3	1062.7	1063.1	1062.7	1061.4	1060.0	1058.7	1057.4
142.5°	1092.7	1092.8	1092.9	1092.3	1090.9	1089.6	1088.3	1086.9
145°	1135.7	1135.9	1136.1	1135.6	1134.3	1132.9	1131.6	1130.3
147.5°	1172.5	1172.8	1173.1	1172.4	1170.8	1169.2	1167.6	1166.0
150°	1196.1	1196.5	1196.9	1196.3	1194.5	1192.7	1190.9	1189.2
152.5°	1216.8	1217.3	1217.7	1217.1	1215.5	1213.9	1212.3	1210.7
155°	1245.4	1246.1	1246.8	1246.2	1244.4	1242.6	1240.9	1239.1
157.5°	1269.1	1269.8	1270.5	1270.0	1268.2	1266.4	1264.6	1262.9
160°	1283.8	1284.7	1285.6	1285.1	1283.4	1281.6	1279.8	1278.0
162.5°	1297.3	1298.5	1299.8	1299.4	1297.5	1295.5	1293.6	1291.6
165°	1314.6	1316.0	1317.3	1317.1	1315.3	1313.5	1311.8	1310.0
167.5°	1327.8	1329.4	1331.0	1330.8	1328.8	1326.8	1324.8	1322.8
170°	1334.5	1336.3	1338.1	1337.9	1335.9	1334.0	1332.0	1330.0
172.5°	1339.7	1341.3	1342.9	1342.7	1340.7	1338.7	1336.7	1334.8
175°	1345.5	1347.3	1349.0	1348.9	1346.9	1344.9	1342.9	1340.9
177.5°	1347.8	1349.1	1350.3	1350.2	1348.8	1347.4	1346.0	1344.5
180°	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9	1346.9

(END OF REPORT)