

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: P333390-930

Luminaire Tested: **S125DIW-S610D1340U930-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333390-930
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: S125DIW-S610D1340U930-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1340 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6332.9 lumens
Efficiency: N/A
Efficacy: 117.7 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

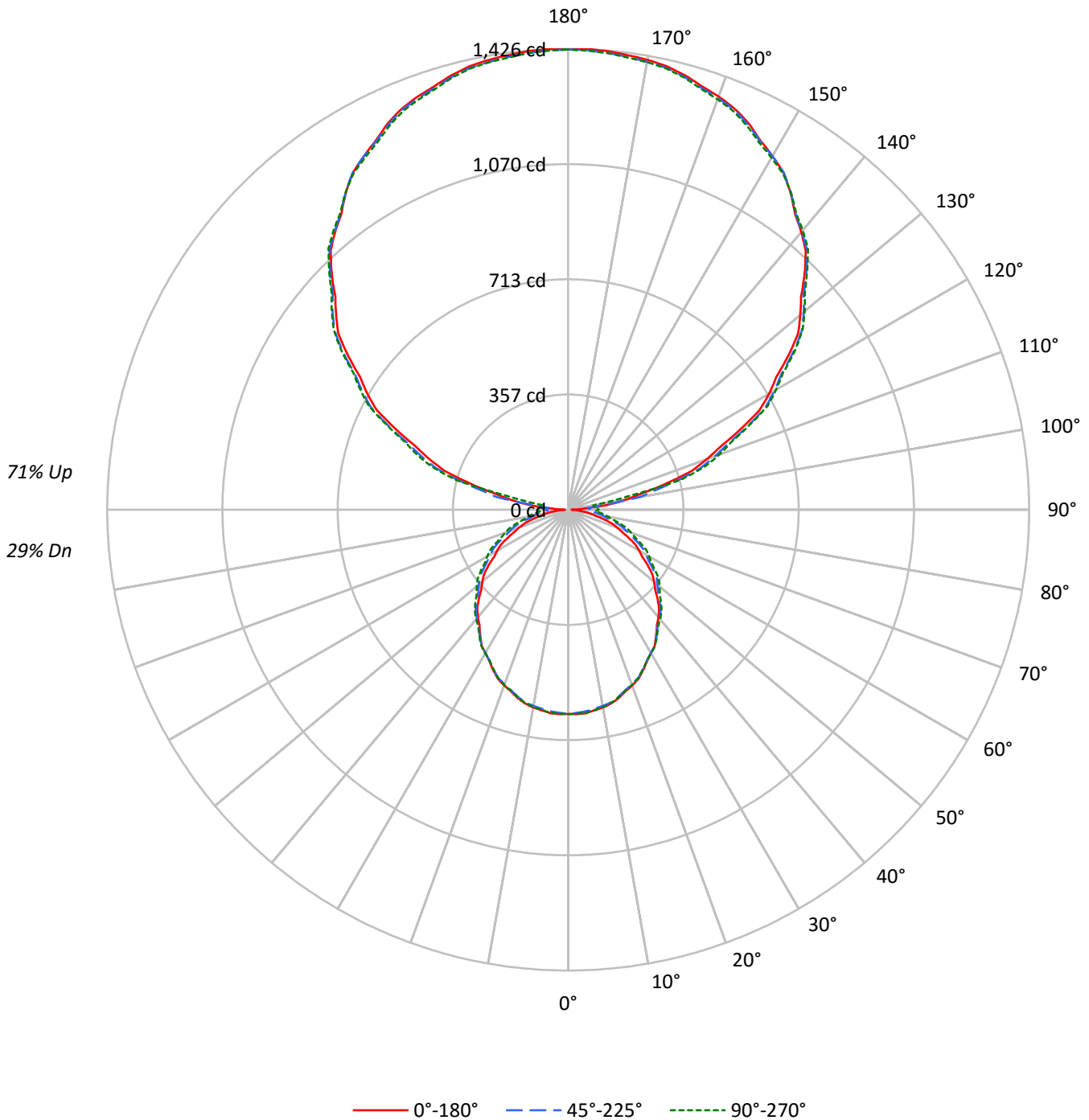
Input Watts (W): 53.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333390-930

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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	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	50	30	10	0														
RCR																																						
0	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	29																				
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30	24																				
2	84	77	71	66	75	69	64	59	54	51	47	40	38	36	28	26	25	19																				
3	77	67	60	54	68	60	54	49	48	43	40	36	33	30	24	23	21	16																				
4	70	59	52	46	62	53	47	42	42	37	34	32	28	26	22	20	18	14																				
5	64	53	45	39	57	47	41	35	37	32	29	28	25	22	20	17	16	12																				
6	59	47	39	33	52	42	36	31	34	29	25	25	22	19	18	15	14	10																				
7	54	42	35	29	48	38	31	27	30	25	22	23	19	17	16	14	12	9																				
8	50	38	31	26	45	35	28	23	28	23	19	21	17	15	15	12	11	8																				
9	47	35	27	23	42	31	25	21	25	20	17	19	16	13	14	11	10	7																				
10	43	32	25	20	39	29	23	18	23	18	15	18	14	12	13	10	9	7																				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4081	4081	4081
5°	4089	4005	4018
10°	4060	3934	3927
15°	4011	3849	3813
20°	3946	3742	3698
25°	3869	3629	3558
30°	3775	3505	3429
35°	3687	3390	3311
40°	3598	3269	3193
45°	3497	3166	3089
50°	3401	3054	2996
55°	3285	2948	2886
60°	3159	2827	2775
65°	3027	2702	2650
70°	2876	2529	2521
75°	2639	2363	2363
80°	2328	2164	2190
85°	2041	2028	2136



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	59.7	0.9
10°-20°	169.6	2.7
20°-30°	252.2	4.0
30°-40°	298.8	4.7
40°-50°	308.9	4.9
50°-60°	284.6	4.5
60°-70°	230.0	3.6
70°-80°	154.0	2.4
80°-90°	82.9	1.3
90°-100°	96.6	1.5
100°-110°	352.0	5.6
110°-120°	600.6	9.5
120°-130°	754.9	11.9
130°-140°	803.9	12.7
140°-150°	750.6	11.9
150°-160°	606.3	9.6
160°-170°	392.1	6.2
170°-180°	135.2	2.1
0°-30°	481.6	7.6
0°-40°	780.4	12.3
0°-60°	1373.8	21.7
0°-90°	1840.8	29.1
90°-120°	1049.1	16.6
90°-150°	3358.6	53.0
90°-180°	4492.0	70.9
0°-180°	6332.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	632	632	632	632	632	
5°	632	630	626	631	631	60
15°	603	604	600	603	601	170
25°	548	550	546	548	546	252
35°	474	478	477	479	479	297
45°	391	398	401	405	406	302
55°	300	310	320	327	330	268
65°	207	221	236	245	248	205
75°	114	130	150	162	165	121
85°	34	55	76	89	95	36
90°	11	39	68	87	95	9
95°	68	79	62	80	85	83
105°	316	330	349	360	364	335
115°	586	596	613	620	618	581
125°	831	838	850	856	856	742
135°	1035	1040	1043	1048	1045	797
145°	1199	1200	1200	1204	1200	749
155°	1320	1314	1315	1318	1310	608
165°	1392	1386	1387	1393	1385	393
175°	1424	1418	1419	1426	1418	136
180°	1424	1424	1424	1424	1424	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9
2.5°	633.3	633.1	632.9	632.7	632.4	631.9	631.2	630.4	629.7	628.8	629.7
5°	631.9	631.5	631.3	631.0	630.7	630.1	629.2	628.2	627.2	626.2	627.4
7.5°	626.2	626.1	626.1	625.9	625.8	625.3	624.3	623.3	622.3	621.3	622.2
10°	621.3	621.3	621.3	621.3	621.3	620.8	619.6	618.6	617.4	616.4	617.3
12.5°	614.4	614.5	614.6	614.7	614.8	614.4	613.5	612.7	611.8	610.9	611.6
15°	603.3	603.5	603.6	603.7	603.9	603.5	602.5	601.5	600.6	599.7	600.5
17.5°	589.0	589.2	589.5	589.8	590.1	589.7	588.8	587.8	586.9	585.9	586.5
20°	578.5	578.9	579.1	579.4	579.7	579.4	578.4	577.4	576.4	575.4	575.8
22.5°	566.7	567.2	567.7	568.2	568.7	568.3	567.3	566.2	565.2	564.1	564.6
25°	548.2	548.6	549.0	549.4	549.8	549.7	548.9	548.0	547.1	546.3	546.9
27.5°	527.7	528.2	528.9	529.5	530.1	529.9	529.0	528.1	527.1	526.2	526.5
30°	512.3	513.1	514.0	514.8	515.6	515.6	514.8	514.0	513.1	512.3	512.6
32.5°	498.4	499.1	499.9	500.6	501.2	501.3	500.8	500.1	499.5	498.9	499.2
35°	474.5	475.5	476.5	477.4	478.3	478.7	478.3	477.8	477.4	477.0	477.4
37.5°	450.6	451.5	452.3	453.2	454.1	454.4	454.4	454.2	454.0	454.0	454.4
40°	434.2	435.4	436.4	437.6	438.6	439.1	439.0	438.9	438.7	438.5	439.1
42.5°	416.4	417.8	419.2	420.7	422.2	423.0	423.3	423.6	423.9	424.2	424.9
45°	390.9	392.4	393.9	395.4	397.0	398.0	398.8	399.4	400.1	400.8	401.8
47.5°	364.8	366.2	367.5	368.9	370.4	371.6	372.8	374.0	375.2	376.3	377.8
50°	346.9	348.4	349.9	351.5	352.9	354.5	356.0	357.5	359.0	360.5	362.1
52.5°	328.1	329.9	331.7	333.6	335.4	337.3	339.2	341.0	342.8	344.6	346.3
55°	300.4	302.6	304.8	307.0	309.2	311.4	313.6	315.8	318.0	320.2	321.8
57.5°	272.2	274.8	277.4	280.1	282.7	285.4	287.9	290.4	292.9	295.5	297.2
60°	253.4	256.1	258.9	261.6	264.4	267.1	269.9	272.6	275.4	278.1	280.2
62.5°	235.1	237.7	240.5	243.3	246.1	248.9	251.8	254.9	257.8	260.8	263.1
65°	206.9	210.1	213.2	216.4	219.6	222.8	226.1	229.4	232.7	236.0	238.1
67.5°	180.4	183.4	186.5	189.6	192.6	195.8	199.2	202.5	205.9	209.3	211.7
70°	161.0	164.2	167.4	170.6	173.7	177.1	180.7	184.3	187.8	191.4	194.0
72.5°	142.2	145.5	148.8	152.1	155.3	158.9	162.8	166.7	170.6	174.6	177.4
75°	114.0	117.6	121.2	124.7	128.3	132.3	136.7	141.1	145.5	149.9	152.6
77.5°	86.8	91.0	95.1	99.2	103.4	107.5	111.8	116.0	120.3	124.5	127.5
80°	70.0	74.1	78.3	82.4	86.5	90.9	95.6	100.3	104.9	109.7	112.7
82.5°	54.6	58.9	63.3	67.7	72.1	76.6	81.4	86.2	91.0	95.8	98.7
85°	34.1	38.6	43.1	47.7	52.3	56.9	61.7	66.5	71.3	76.2	79.2
87.5°	19.6	24.3	29.1	33.9	38.6	43.5	48.6	53.6	58.6	63.6	67.0
90°	11.0	17.3	23.6	29.8	36.1	42.4	48.8	55.0	61.4	67.7	72.0
92.5°	25.2	28.0	30.7	33.4	36.2	40.7	47.0	53.2	59.4	65.7	70.0
95°	68.2	71.1	73.9	76.9	79.7	79.1	74.8	70.6	66.4	62.1	66.3
97.5°	132.9	137.4	141.9	146.4	150.9	146.6	133.5	120.3	107.2	94.1	90.3
100°	183.1	186.7	190.3	193.9	197.5	201.9	207.3	212.6	218.0	223.3	191.3
102.5°	234.2	237.7	241.2	244.8	248.3	252.6	257.5	262.3	267.2	272.0	268.2
105°	315.9	319.0	322.2	325.4	328.5	332.2	336.2	340.4	344.5	348.6	351.4
107.5°	400.9	402.8	404.6	406.5	408.4	411.6	416.0	420.4	424.9	429.3	432.0
110°	456.2	457.8	459.4	461.1	462.8	465.7	470.0	474.3	478.7	483.1	484.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	508.5	510.4	512.3	514.1	516.0	519.0	523.0	527.0	531.1	535.1	536.7
115°	586.4	588.6	590.7	592.8	594.9	597.9	601.8	605.5	609.4	613.2	614.7
117.5°	667.1	667.6	668.2	668.9	669.4	671.9	676.1	680.4	684.7	688.9	690.1
120°	717.7	718.0	718.1	718.3	718.4	720.5	724.3	728.2	732.1	736.0	737.8
122.5°	762.0	763.1	764.2	765.2	766.4	768.6	771.9	775.3	778.7	782.1	783.9
125°	831.1	832.7	834.1	835.7	837.1	839.3	842.0	844.8	847.5	850.3	851.6
127.5°	896.6	897.6	898.6	899.7	900.7	902.3	904.4	906.5	908.7	910.8	912.3
130°	937.1	938.2	939.2	940.2	941.3	942.9	945.0	947.2	949.3	951.5	952.8
132.5°	977.1	978.5	979.8	981.1	982.5	983.7	984.6	985.6	986.6	987.5	989.3
135°	1034.7	1035.9	1037.2	1038.4	1039.8	1040.6	1041.1	1041.6	1042.1	1042.6	1043.9
137.5°	1087.5	1088.7	1089.7	1090.9	1092.0	1092.6	1092.6	1092.7	1092.7	1092.7	1094.5
140°	1121.7	1122.2	1122.6	1123.1	1123.6	1123.7	1123.6	1123.6	1123.5	1123.3	1125.4
142.5°	1152.9	1153.1	1153.2	1153.4	1153.6	1153.9	1154.2	1154.5	1155.0	1155.3	1156.7
145°	1198.7	1199.1	1199.4	1199.7	1200.0	1200.2	1200.2	1200.2	1200.2	1200.2	1201.2
147.5°	1238.2	1238.1	1238.0	1238.0	1237.9	1238.0	1238.2	1238.5	1238.8	1239.1	1239.6
150°	1263.6	1263.1	1262.7	1262.2	1261.7	1261.7	1262.2	1262.7	1263.1	1263.6	1264.0
152.5°	1288.0	1287.0	1286.0	1285.0	1283.9	1283.6	1284.1	1284.6	1285.1	1285.5	1286.0
155°	1319.5	1318.1	1316.7	1315.3	1313.9	1313.4	1313.9	1314.3	1314.8	1315.3	1316.0
157.5°	1343.8	1343.0	1342.1	1341.2	1340.4	1340.0	1340.0	1340.1	1340.2	1340.2	1340.9
160°	1360.7	1359.3	1357.9	1356.4	1355.0	1354.5	1354.7	1354.9	1355.2	1355.4	1356.3
162.5°	1374.2	1372.8	1371.3	1369.9	1368.6	1368.0	1368.2	1368.5	1368.6	1368.9	1370.2
165°	1392.4	1390.9	1389.5	1388.1	1386.7	1386.1	1386.3	1386.6	1386.8	1387.1	1388.5
167.5°	1405.8	1404.4	1403.0	1401.5	1400.0	1399.5	1399.6	1399.9	1400.1	1400.4	1402.1
170°	1413.5	1411.9	1410.1	1408.5	1406.9	1406.1	1406.4	1406.6	1406.9	1407.1	1409.0
172.5°	1418.5	1416.9	1415.3	1413.6	1411.9	1411.4	1411.8	1412.2	1412.6	1413.0	1414.7
175°	1424.0	1422.6	1421.2	1419.8	1418.4	1417.8	1418.1	1418.3	1418.5	1418.7	1420.6
177.5°	1426.5	1425.4	1424.3	1423.2	1422.0	1421.6	1421.8	1422.0	1422.1	1422.3	1423.7
180°	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	631.9	631.9	631.9	631.9	631.9	631.9	631.9	631.9
2.5°	630.4	631.2	631.9	632.3	632.2	632.1	631.9	631.9
5°	628.4	629.6	630.6	631.1	631.0	630.9	630.7	630.6
7.5°	623.2	624.2	625.2	625.6	625.4	625.3	625.2	625.0
10°	618.3	619.2	620.2	620.6	620.5	620.4	620.2	620.0
12.5°	612.4	613.1	613.9	614.1	613.7	613.3	613.0	612.6
15°	601.3	602.1	602.9	603.1	602.5	601.9	601.4	600.9
17.5°	587.2	587.7	588.4	588.6	588.2	587.9	587.6	587.3
20°	576.3	576.7	577.2	577.3	577.3	577.3	577.3	577.3
22.5°	565.1	565.7	566.1	566.2	565.9	565.6	565.2	564.9
25°	547.5	548.0	548.5	548.5	547.8	547.1	546.4	545.8
27.5°	526.9	527.3	527.7	527.7	527.5	527.3	527.0	526.8
30°	512.8	513.1	513.4	513.5	513.3	513.1	513.1	512.9
32.5°	499.5	499.7	500.0	500.1	499.9	499.8	499.7	499.5
35°	477.8	478.3	478.7	478.8	478.8	478.8	478.8	478.8
37.5°	455.0	455.6	456.2	456.4	456.3	456.2	456.2	456.2
40°	439.7	440.3	440.8	441.2	441.5	441.7	442.1	442.3
42.5°	425.5	426.2	426.8	427.2	427.3	427.3	427.4	427.5
45°	402.7	403.7	404.6	405.2	405.4	405.4	405.6	405.8
47.5°	379.2	380.6	382.0	382.9	383.2	383.4	383.8	384.1
50°	363.5	365.1	366.6	367.5	367.9	368.4	368.8	369.2
52.5°	347.9	349.5	351.1	352.1	352.5	352.7	353.0	353.4
55°	323.3	324.8	326.3	327.3	327.9	328.5	329.0	329.5
57.5°	299.0	300.7	302.4	303.5	303.9	304.4	304.8	305.2
60°	282.3	284.3	286.4	287.6	288.0	288.5	288.9	289.3
62.5°	265.4	267.7	269.9	271.3	271.8	272.4	272.9	273.5
65°	240.1	242.2	244.3	245.6	246.1	246.7	247.2	247.8
67.5°	214.3	216.8	219.2	220.9	221.6	222.3	223.1	223.7
70°	196.7	199.3	201.9	203.6	204.4	205.2	206.1	206.9
72.5°	180.3	183.0	185.9	187.6	188.3	188.8	189.5	190.0
75°	155.4	158.2	160.9	162.7	163.3	164.0	164.7	165.4
77.5°	130.5	133.6	136.6	138.4	138.9	139.5	140.1	140.6
80°	115.7	118.7	121.7	123.5	124.1	124.7	125.2	125.7
82.5°	101.6	104.5	107.5	109.4	110.4	111.4	112.3	113.3
85°	82.3	85.3	88.3	90.3	91.5	92.5	93.7	94.7
87.5°	70.4	73.8	77.2	79.4	80.6	81.7	82.8	83.9
90°	76.4	80.7	85.0	88.1	89.7	91.4	93.0	94.7
92.5°	74.2	78.4	82.6	85.4	86.7	88.0	89.3	90.6
95°	70.5	74.7	78.9	81.5	82.4	83.4	84.4	85.4
97.5°	86.6	82.9	79.2	77.8	78.7	79.7	80.6	81.5
100°	159.2	127.1	95.1	79.0	78.8	78.8	78.7	78.5
102.5°	264.3	260.5	256.7	247.2	232.0	217.0	201.8	186.7
105°	354.2	356.9	359.6	361.4	362.2	362.9	363.5	364.3
107.5°	434.8	437.6	440.3	441.8	442.0	442.1	442.3	442.4
110°	486.8	488.8	490.6	492.2	493.4	494.6	495.8	497.0



TEST NUMBER: P333390-930

CATALOG NUMBER: S125DIW-S610D1340U930-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	538.3	539.9	541.5	542.7	543.3	544.0	544.5	545.2
115°	616.3	617.8	619.4	619.8	619.2	618.6	618.1	617.5
117.5°	691.2	692.4	693.4	694.1	694.5	694.8	695.1	695.5
120°	739.7	741.6	743.5	744.2	743.9	743.5	743.1	742.8
122.5°	785.6	787.4	789.1	789.8	789.2	788.7	788.1	787.7
125°	852.8	854.1	855.3	856.0	856.0	855.9	855.9	855.9
127.5°	913.8	915.3	916.9	917.1	916.2	915.3	914.4	913.4
130°	954.0	955.2	956.4	956.8	956.3	955.8	955.3	954.8
132.5°	991.1	992.9	994.7	995.2	994.7	994.1	993.5	992.9
135°	1045.3	1046.6	1047.9	1048.2	1047.5	1046.8	1046.0	1045.3
137.5°	1096.2	1097.9	1099.6	1100.2	1099.5	1098.8	1098.1	1097.5
140°	1127.3	1129.3	1131.3	1131.9	1131.0	1130.2	1129.3	1128.5
142.5°	1158.1	1159.4	1160.8	1161.1	1160.3	1159.4	1158.5	1157.6
145°	1202.1	1203.0	1204.0	1204.0	1203.1	1202.2	1201.3	1200.5
147.5°	1240.1	1240.6	1241.0	1240.6	1239.2	1237.7	1236.3	1234.9
150°	1264.5	1264.9	1265.4	1264.8	1263.1	1261.3	1259.6	1257.8
152.5°	1286.5	1286.9	1287.4	1286.8	1285.2	1283.4	1281.8	1280.2
155°	1316.7	1317.4	1318.1	1317.5	1315.6	1313.8	1311.9	1310.0
157.5°	1341.7	1342.5	1343.2	1342.6	1340.8	1338.9	1337.0	1335.1
160°	1357.3	1358.2	1359.2	1358.7	1356.8	1354.9	1353.1	1351.2
162.5°	1371.5	1372.9	1374.2	1373.8	1371.7	1369.6	1367.6	1365.5
165°	1389.8	1391.3	1392.7	1392.4	1390.6	1388.7	1386.8	1384.9
167.5°	1403.8	1405.4	1407.1	1406.9	1404.8	1402.7	1400.6	1398.5
170°	1410.9	1412.8	1414.6	1414.5	1412.4	1410.3	1408.2	1406.1
172.5°	1416.4	1418.1	1419.8	1419.6	1417.5	1415.4	1413.2	1411.1
175°	1422.5	1424.3	1426.2	1426.1	1424.0	1421.9	1419.8	1417.6
177.5°	1425.0	1426.3	1427.6	1427.5	1426.0	1424.5	1422.9	1421.5
180°	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0	1424.0

(END OF REPORT)