

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: P333399-927

Luminaire Tested: **S125DIW-S610D1560U927-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333399-927
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: S125DIW-S610D1560U927-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1560 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 6267.0 lumens
Efficiency: N/A
Efficacy: 103.4 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

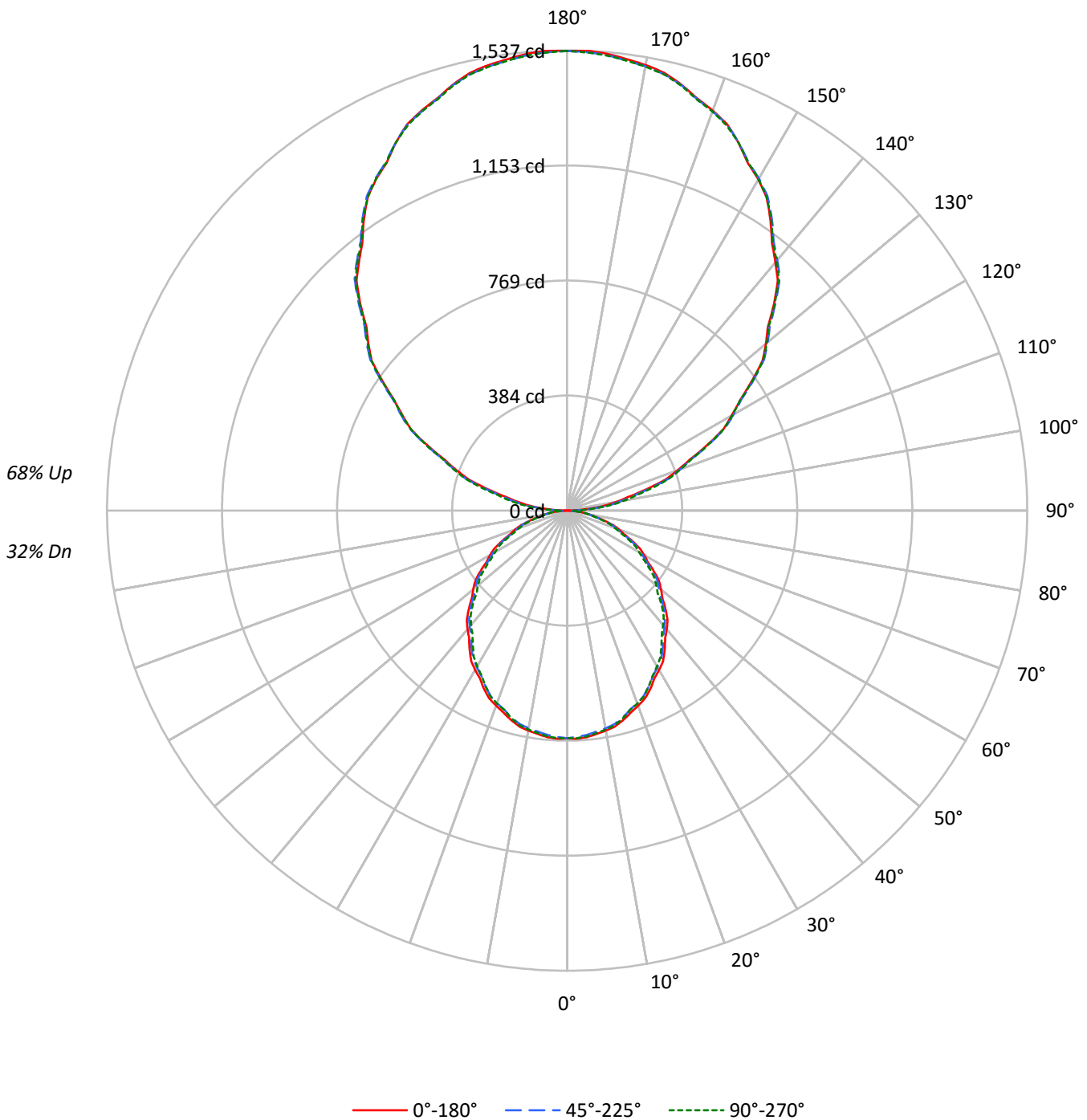
Input Watts (W): 60.6
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	103	103	103	103	92	92	92	92	73	73	73	55	55	55	39	39	39	32
1	94	89	86	82	84	81	77	74	64	62	60	49	47	46	35	34	33	27
2	85	78	72	67	76	70	65	61	56	52	49	43	40	38	30	29	28	22
3	78	68	61	56	70	62	56	51	49	45	41	38	35	32	27	25	24	19
4	71	60	53	47	64	55	48	43	44	39	35	34	30	28	24	22	20	16
5	65	54	46	40	58	49	42	37	39	34	30	30	27	24	22	19	18	14
6	60	48	40	35	54	44	37	32	35	30	26	27	24	21	20	17	15	12
7	55	43	36	30	49	39	33	28	32	27	23	25	21	18	18	16	14	11
8	51	39	32	27	46	36	29	24	29	24	20	22	19	16	16	14	12	10
9	48	36	28	23	43	32	26	22	26	21	18	21	17	15	15	13	11	9
10	44	33	26	21	40	30	24	19	24	19	16	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4914	4914	4914
5°	4924	4877	4909
10°	4894	4844	4871
15°	4841	4785	4805
20°	4766	4704	4712
25°	4684	4606	4603
30°	4583	4502	4480
35°	4475	4389	4328
40°	4364	4268	4207
45°	4244	4156	4074
50°	4112	4022	3900
55°	3985	3869	3762
60°	3834	3716	3584
65°	3651	3533	3412
70°	3478	3320	3206
75°	3169	3064	2959
80°	2819	2775	2708
85°	2453	2497	2364



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	71.7	1.1
10°-20°	202.6	3.2
20°-30°	299.2	4.8
30°-40°	349.1	5.6
40°-50°	350.6	5.6
50°-60°	307.8	4.9
60°-70°	229.3	3.7
70°-80°	131.1	2.1
80°-90°	41.5	0.7
90°-100°	102.8	1.6
100°-110°	303.6	4.8
110°-120°	514.3	8.2
120°-130°	676.9	10.8
130°-140°	758.4	12.1
140°-150°	743.3	11.9
150°-160°	624.3	10.0
160°-170°	415.0	6.6
170°-180°	145.2	2.3
0°-30°	573.6	9.2
0°-40°	922.7	14.7
0°-60°	1581.1	25.2
0°-90°	1983.0	31.6
90°-120°	920.8	14.7
90°-150°	3099.4	49.5
90°-180°	4284.0	68.4
0°-180°	6267.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	761	761	761	761	761	
5°	760	758	752	757	757	72
15°	724	722	716	719	719	204
25°	657	654	646	648	646	302
35°	568	565	557	554	549	355
45°	465	462	455	448	446	358
55°	354	352	344	338	334	316
65°	239	237	231	226	223	237
75°	127	126	123	121	119	135
85°	33	34	34	33	32	37
90°	1	11	19	25	29	6
95°	78	81	92	100	103	83
105°	272	278	286	292	296	291
115°	515	520	522	521	520	509
125°	752	758	760	758	756	673
135°	977	984	986	985	981	753
145°	1184	1189	1192	1192	1189	740
155°	1355	1355	1356	1360	1355	624
165°	1473	1471	1472	1476	1470	415
175°	1532	1527	1527	1533	1526	145
180°	1535	1535	1535	1535	1535	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8
2.5°	762.7	762.4	762.1	761.8	761.4	760.7	759.7	758.6	757.6	756.5	757.6
5°	759.6	759.3	759.1	758.8	758.5	757.7	756.4	755.0	753.7	752.3	753.6
7.5°	752.6	752.3	752.1	751.8	751.5	750.7	749.2	747.7	746.2	744.8	745.9
10°	746.3	746.1	745.8	745.5	745.3	744.4	742.9	741.5	740.0	738.6	739.6
12.5°	738.6	738.2	737.7	737.2	736.7	735.8	734.4	733.1	731.7	730.3	731.2
15°	724.1	723.7	723.3	722.9	722.5	721.5	720.1	718.6	717.1	715.7	716.3
17.5°	707.3	706.8	706.2	705.6	705.0	703.9	702.4	700.8	699.3	697.8	698.6
20°	693.4	693.1	692.8	692.6	692.3	691.3	689.6	687.9	686.1	684.4	685.3
22.5°	679.4	678.9	678.4	677.9	677.5	676.4	674.8	673.2	671.5	669.9	670.5
25°	657.3	656.6	655.9	655.3	654.6	653.4	651.6	649.9	648.2	646.4	646.7
27.5°	631.4	631.0	630.6	630.2	629.8	628.7	626.9	625.1	623.3	621.5	621.5
30°	614.5	614.1	613.7	613.3	612.9	611.7	609.7	607.7	605.7	603.7	603.4
32.5°	596.2	595.6	595.0	594.4	593.7	592.6	590.8	589.0	587.2	585.4	584.9
35°	567.6	567.0	566.5	566.0	565.5	564.3	562.4	560.5	558.6	556.7	556.1
37.5°	537.8	537.2	536.5	535.8	535.2	533.9	532.2	530.4	528.6	526.9	525.9
40°	517.6	517.0	516.3	515.6	514.9	513.7	511.8	509.9	508.0	506.2	505.0
42.5°	496.0	495.4	494.8	494.2	493.7	492.5	490.6	488.8	486.9	485.0	483.9
45°	464.7	464.1	463.6	463.0	462.6	461.4	459.9	458.3	456.6	455.0	453.4
47.5°	430.9	430.9	431.0	431.0	431.0	430.1	428.2	426.3	424.4	422.4	420.8
50°	409.3	408.8	408.4	408.1	407.7	406.7	405.0	403.5	401.9	400.3	398.5
52.5°	387.1	386.8	386.6	386.3	386.0	384.9	383.3	381.5	379.9	378.1	376.6
55°	353.9	353.5	353.1	352.7	352.3	351.2	349.3	347.5	345.5	343.6	342.5
57.5°	318.9	318.7	318.5	318.2	318.1	317.1	315.5	313.9	312.4	310.9	309.3
60°	296.8	296.2	295.6	295.1	294.6	293.6	292.2	290.7	289.1	287.7	286.4
62.5°	273.6	273.2	272.7	272.4	271.9	271.1	269.8	268.5	267.3	266.0	264.6
65°	238.9	238.7	238.4	238.1	237.9	237.0	235.5	234.1	232.6	231.2	229.9
67.5°	205.3	204.8	204.2	203.7	203.1	202.3	201.2	200.1	199.0	197.9	196.9
70°	184.2	183.5	182.8	182.2	181.5	180.5	179.4	178.2	177.0	175.8	174.9
72.5°	161.1	160.6	160.2	159.7	159.2	158.6	157.9	157.1	156.3	155.5	154.6
75°	127.0	126.7	126.4	126.2	126.0	125.5	124.8	124.1	123.4	122.8	122.4
77.5°	95.6	95.5	95.4	95.2	95.1	94.9	94.5	94.2	93.8	93.4	93.2
80°	75.8	75.8	75.8	75.8	75.8	75.7	75.4	75.2	74.9	74.6	74.5
82.5°	58.5	58.3	58.1	57.8	57.7	57.5	57.4	57.4	57.4	57.3	57.0
85°	33.1	33.3	33.4	33.5	33.7	33.7	33.7	33.7	33.7	33.7	33.6
87.5°	13.2	13.6	14.1	14.5	15.0	15.3	15.5	15.8	16.1	16.3	16.6
90°	1.2	3.3	5.5	7.6	9.7	11.6	13.5	15.4	17.3	19.1	20.4
92.5°	28.9	30.4	31.9	33.4	34.9	36.8	39.1	41.3	43.6	45.9	47.6
95°	77.6	78.2	78.7	79.2	79.8	81.4	84.1	86.7	89.4	92.0	93.9
97.5°	129.0	129.2	129.4	129.7	129.9	131.8	135.5	139.2	142.8	146.5	148.2
100°	167.2	167.2	167.2	167.2	167.2	169.0	172.5	175.9	179.4	182.8	185.2
102.5°	208.3	209.5	210.5	211.5	212.6	214.0	215.8	217.5	219.3	221.0	223.6
105°	272.4	273.7	275.0	276.4	277.7	279.2	280.7	282.3	283.9	285.6	287.2
107.5°	343.1	344.4	345.8	347.1	348.4	349.7	350.9	352.1	353.4	354.6	355.4
110°	391.9	393.2	394.5	395.9	397.2	398.2	399.0	399.8	400.6	401.4	402.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	441.6	442.3	443.0	443.6	444.3	445.2	446.2	447.2	448.2	449.2	449.6
115°	514.9	516.0	517.1	518.1	519.2	520.0	520.5	521.0	521.6	522.1	521.8
117.5°	588.5	589.0	589.5	589.9	590.4	590.9	591.4	591.8	592.3	592.9	593.0
120°	634.4	635.7	637.1	638.4	639.7	640.5	640.8	641.0	641.3	641.6	641.6
122.5°	684.1	684.6	685.1	685.6	686.0	686.6	687.3	688.0	688.6	689.4	689.1
125°	751.5	753.0	754.7	756.3	757.9	758.8	759.1	759.3	759.6	759.9	759.3
127.5°	823.2	824.1	825.0	825.9	826.8	827.4	827.8	828.1	828.4	828.7	828.4
130°	866.2	867.5	868.9	870.1	871.5	872.4	873.0	873.5	874.0	874.6	874.3
132.5°	909.2	911.4	913.5	915.8	917.9	918.9	918.9	918.7	918.6	918.5	918.2
135°	977.3	978.9	980.5	982.1	983.7	984.6	984.8	985.2	985.4	985.6	985.6
137.5°	1041.3	1042.9	1044.4	1045.9	1047.5	1048.5	1049.2	1049.7	1050.3	1050.9	1051.2
140°	1082.4	1083.8	1085.1	1086.4	1087.7	1088.8	1089.6	1090.4	1091.2	1092.0	1092.5
142.5°	1123.6	1124.7	1125.8	1126.9	1128.0	1129.0	1130.0	1131.1	1132.1	1133.1	1133.4
145°	1184.0	1185.0	1186.1	1187.2	1188.3	1189.1	1189.9	1190.7	1191.5	1192.3	1192.3
147.5°	1239.9	1240.5	1241.0	1241.7	1242.2	1242.9	1243.5	1244.1	1244.8	1245.4	1246.0
150°	1277.2	1276.9	1276.7	1276.4	1276.1	1276.5	1277.6	1278.7	1279.7	1280.8	1280.8
152.5°	1307.7	1308.1	1308.5	1308.8	1309.2	1309.6	1310.1	1310.5	1310.9	1311.4	1312.0
155°	1354.9	1354.9	1354.9	1354.9	1354.9	1354.9	1355.3	1355.5	1355.7	1356.1	1357.1
157.5°	1396.9	1396.3	1395.7	1395.1	1394.6	1394.4	1394.6	1395.0	1395.2	1395.4	1396.5
160°	1421.7	1420.9	1420.1	1419.4	1418.6	1418.3	1418.6	1418.8	1419.1	1419.4	1420.4
162.5°	1443.8	1443.1	1442.6	1442.0	1441.4	1441.1	1441.1	1441.2	1441.3	1441.3	1442.6
165°	1473.1	1472.6	1472.0	1471.6	1471.0	1470.8	1471.2	1471.4	1471.6	1472.0	1473.0
167.5°	1497.9	1496.9	1495.9	1494.8	1493.7	1493.2	1493.2	1493.2	1493.2	1493.2	1494.8
170°	1511.3	1510.3	1509.2	1508.2	1507.1	1506.6	1506.6	1506.6	1506.6	1506.6	1508.2
172.5°	1520.9	1519.9	1518.8	1517.7	1516.6	1516.2	1516.2	1516.2	1516.2	1516.2	1517.7
175°	1531.7	1530.6	1529.5	1528.4	1527.4	1526.9	1526.9	1526.9	1526.9	1526.9	1528.4
177.5°	1537.2	1536.3	1535.5	1534.6	1533.7	1533.2	1533.0	1532.8	1532.6	1532.4	1533.7
180°	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	760.8	760.8	760.8	760.8	760.8	760.8	760.8	760.8
2.5°	758.6	759.7	760.7	761.2	761.1	761.0	760.9	760.8
5°	754.8	756.0	757.2	757.7	757.6	757.5	757.3	757.2
7.5°	747.1	748.3	749.5	750.0	749.9	749.7	749.6	749.5
10°	740.7	741.7	742.8	743.3	743.1	743.0	742.8	742.8
12.5°	732.1	732.9	733.7	734.2	734.1	734.1	734.1	734.0
15°	717.0	717.6	718.4	718.7	718.7	718.7	718.7	718.7
17.5°	699.5	700.3	701.2	701.2	700.5	699.9	699.3	698.5
20°	686.2	687.1	688.1	688.2	687.5	686.9	686.2	685.6
22.5°	671.1	671.8	672.4	672.5	672.0	671.5	671.1	670.7
25°	647.0	647.2	647.5	647.5	647.1	646.7	646.3	645.9
27.5°	621.6	621.7	621.7	621.5	621.2	620.8	620.4	620.0
30°	603.2	602.9	602.6	602.3	601.9	601.5	601.1	600.7
32.5°	584.5	583.9	583.4	582.9	582.2	581.5	580.7	580.0
35°	555.4	554.8	554.1	553.2	552.2	551.0	550.0	548.9
37.5°	524.9	523.9	522.9	522.1	521.5	520.9	520.3	519.7
40°	503.7	502.6	501.4	500.6	500.2	499.8	499.4	499.0
42.5°	482.8	481.7	480.6	479.7	479.1	478.6	477.9	477.3
45°	451.8	450.2	448.6	447.6	447.2	446.8	446.4	446.0
47.5°	419.1	417.5	415.9	414.6	413.7	412.7	411.8	410.8
50°	396.8	395.1	393.3	392.0	391.0	390.1	389.1	388.2
52.5°	375.0	373.5	372.0	370.7	369.7	368.6	367.6	366.5
55°	341.3	340.1	338.9	337.8	336.8	335.9	335.0	334.1
57.5°	307.7	306.2	304.6	303.6	303.1	302.5	302.1	301.6
60°	285.0	283.7	282.3	281.2	280.3	279.3	278.4	277.5
62.5°	263.2	261.7	260.2	259.2	258.5	257.7	257.0	256.3
65°	228.7	227.5	226.3	225.5	224.9	224.3	223.9	223.3
67.5°	195.9	194.9	193.8	193.1	192.8	192.5	192.2	191.9
70°	174.1	173.3	172.5	171.9	171.3	170.8	170.2	169.8
72.5°	153.7	152.8	151.9	151.1	150.6	150.1	149.6	149.0
75°	122.0	121.6	121.2	120.7	120.2	119.6	119.1	118.6
77.5°	92.9	92.7	92.4	92.1	91.7	91.4	91.0	90.6
80°	74.4	74.2	74.1	73.9	73.6	73.4	73.1	72.8
82.5°	56.8	56.6	56.3	56.2	56.2	56.1	56.0	56.0
85°	33.4	33.3	33.2	33.0	32.7	32.4	32.2	31.9
87.5°	16.9	17.1	17.4	17.5	17.4	17.4	17.3	17.3
90°	21.8	23.1	24.4	25.5	26.3	27.1	27.9	28.7
92.5°	49.4	51.1	52.9	54.0	54.7	55.2	55.8	56.4
95°	95.7	97.6	99.4	100.6	101.2	101.7	102.2	102.7
97.5°	150.0	151.7	153.4	154.6	154.9	155.2	155.5	155.8
100°	187.6	190.0	192.3	193.8	194.3	194.9	195.4	195.9
102.5°	226.2	228.9	231.4	233.1	233.9	234.6	235.4	236.1
105°	288.8	290.3	291.9	293.1	293.9	294.7	295.5	296.3
107.5°	356.2	357.0	357.7	358.1	358.1	358.1	358.0	357.9
110°	403.1	403.9	404.6	404.9	404.6	404.3	404.1	403.9



TEST NUMBER: P333399-927

CATALOG NUMBER: S125DIW-S610D1560U927-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	450.0	450.4	450.7	450.7	450.2	449.7	449.2	448.8
115°	521.6	521.3	521.0	520.8	520.5	520.2	520.0	519.8
117.5°	593.3	593.5	593.7	593.3	592.2	591.1	590.1	589.0
120°	641.6	641.6	641.6	641.0	640.0	638.9	637.9	636.8
122.5°	689.0	688.7	688.5	688.0	687.1	686.3	685.4	684.6
125°	758.8	758.3	757.7	757.3	757.1	756.8	756.5	756.3
127.5°	828.1	827.9	827.6	827.2	826.6	826.2	825.6	825.1
130°	874.0	873.8	873.5	873.1	872.6	872.0	871.5	871.0
132.5°	918.0	917.7	917.4	917.0	916.2	915.4	914.7	913.9
135°	985.6	985.6	985.6	985.2	984.0	983.0	981.9	980.9
137.5°	1051.5	1051.9	1052.2	1051.7	1050.4	1049.0	1047.7	1046.3
140°	1093.1	1093.6	1094.1	1093.7	1092.4	1091.1	1089.7	1088.4
142.5°	1133.7	1134.0	1134.4	1133.9	1132.5	1131.2	1129.9	1128.5
145°	1192.3	1192.3	1192.3	1191.9	1191.1	1190.3	1189.5	1188.7
147.5°	1246.7	1247.3	1247.9	1247.4	1245.5	1243.7	1242.0	1240.2
150°	1280.8	1280.8	1280.8	1280.5	1279.9	1279.5	1278.9	1278.3
152.5°	1312.6	1313.3	1313.9	1313.8	1312.8	1311.9	1310.9	1310.0
155°	1358.1	1359.2	1360.3	1360.2	1358.8	1357.5	1356.1	1354.9
157.5°	1397.6	1398.7	1399.7	1399.4	1397.6	1395.8	1394.1	1392.3
160°	1421.5	1422.5	1423.6	1423.5	1422.1	1420.8	1419.5	1418.2
162.5°	1443.9	1445.2	1446.4	1446.3	1444.8	1443.2	1441.7	1440.1
165°	1474.0	1475.1	1476.2	1475.9	1474.3	1472.7	1471.2	1469.5
167.5°	1496.4	1497.9	1499.5	1499.5	1497.9	1496.3	1494.6	1492.9
170°	1509.7	1511.3	1512.9	1512.8	1510.9	1509.1	1507.2	1505.4
172.5°	1519.3	1520.9	1522.5	1522.5	1520.8	1519.2	1517.5	1515.9
175°	1530.1	1531.7	1533.3	1533.1	1531.3	1529.4	1527.6	1525.7
177.5°	1534.9	1536.2	1537.5	1537.4	1535.9	1534.4	1532.9	1531.4
180°	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2	1535.2

(END OF REPORT)