

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: P333379-935

Luminaire Tested: **S125DIW-S610D770U935-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333379-935  
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-S610D770U935-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 610 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 770 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

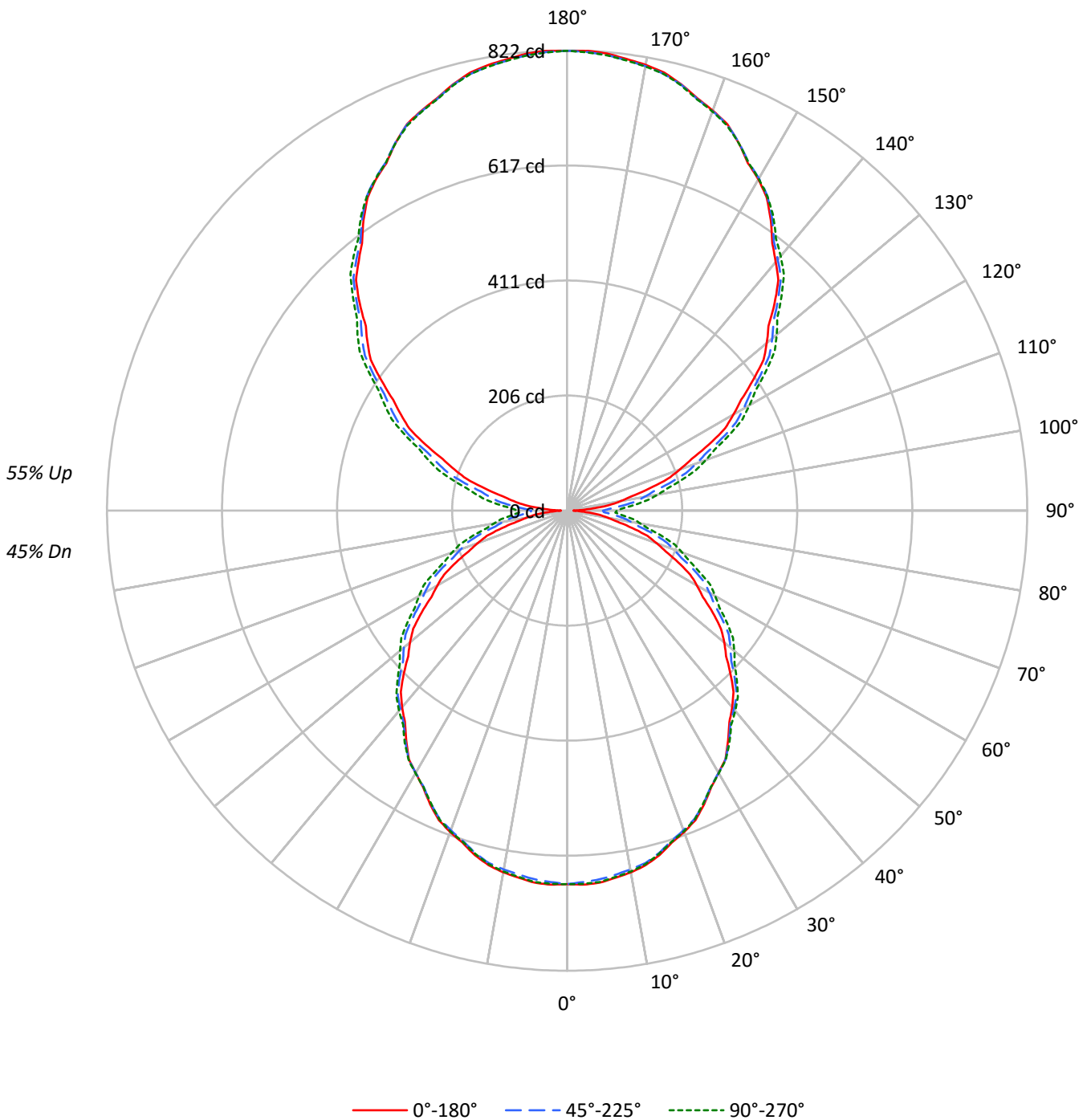
Lumens per Lamp: N/A  
Luminaire Lumens: 4360.3 lumens  
Efficiency: N/A  
Efficacy: 116.0 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')  
CIE Type: General Diffuse  
  
Input Watts (W): 37.6  
Input Voltage (V): 120  
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



TEST NUMBER: P333379-935

CATALOG NUMBER: S125DIW-S610D770U935-4F0-1E-UDD-D1

### Luminous Intensity Polar Plot





TEST NUMBER: P333379-935

CATALOG NUMBER: S125DIW-S610D770U935-4F0-1E-UDD-D1

**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	106	106	106	106	97	97	97	97	80	80	80	65	65	65	51	51	51	45
1	96	91	87	83	88	84	80	77	69	67	64	56	54	53	44	43	42	36
2	87	79	73	68	79	73	67	63	60	56	53	49	46	44	38	36	35	30
3	79	70	62	56	72	64	57	52	53	48	44	43	40	37	34	31	29	25
4	72	61	53	47	66	56	49	44	47	42	37	38	34	31	30	27	25	21
5	66	55	46	40	60	50	43	37	42	36	32	34	30	27	27	24	22	18
6	61	49	41	35	56	45	38	32	38	32	28	31	27	23	24	21	19	16
7	56	44	36	30	51	41	33	28	34	29	24	28	24	21	22	19	17	14
8	52	40	32	27	48	37	30	25	31	26	22	26	21	18	20	17	15	13
9	49	36	29	24	44	34	27	22	28	23	19	23	19	16	19	16	14	11
10	45	33	26	21	41	31	24	20	26	21	17	22	18	15	18	14	12	10

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	4310	4310	4310
5°	4318	4229	4243
10°	4288	4154	4148
15°	4236	4064	4027
20°	4168	3952	3906
25°	4086	3833	3757
30°	3987	3701	3622
35°	3894	3580	3497
40°	3800	3452	3372
45°	3693	3344	3261
50°	3592	3225	3163
55°	3469	3114	3048
60°	3336	2986	2931
65°	3196	2854	2799
70°	3036	2672	2663
75°	2788	2496	2496
80°	2461	2284	2314
85°	2155	2142	2255



TEST NUMBER: P333379-935

CATALOG NUMBER: S125DIW-S610D770U935-4F0-1E-UDD-D1

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	63.1	1.4
10°-20°	179.1	4.1
20°-30°	266.4	6.1
30°-40°	315.5	7.2
40°-50°	326.2	7.5
50°-60°	300.5	6.9
60°-70°	242.9	5.6
70°-80°	162.7	3.7
80°-90°	86.2	2.0
90°-100°	102.3	2.3
100°-110°	197.3	4.5
110°-120°	298.5	6.8
120°-130°	375.4	8.6
130°-140°	411.6	9.4
140°-150°	398.8	9.1
150°-160°	334.0	7.7
160°-170°	222.0	5.1
170°-180°	77.7	1.8
0°-30°	508.6	11.7
0°-40°	824.1	18.9
0°-60°	1450.8	33.3
0°-90°	1942.6	44.6
90°-120°	598.2	13.7
90°-150°	1784.0	40.9
90°-180°	2418.0	55.5
0°-180°	4360.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	667	667	667	667	667	
5°	667	666	661	666	666	63
15°	637	638	633	637	635	179
25°	579	581	577	579	576	266
35°	501	505	504	506	506	313
45°	413	420	423	428	428	318
55°	317	328	338	345	348	284
65°	218	234	249	259	262	217
75°	120	138	158	171	175	128
85°	36	58	80	94	100	38
90°	11	37	64	81	89	9
95°	50	69	97	115	122	51
105°	152	166	189	205	212	162
115°	279	287	305	316	319	276
125°	405	408	422	430	433	362
135°	524	527	532	541	542	404
145°	634	636	638	641	642	396
155°	725	725	726	728	725	334
165°	788	787	788	790	786	222
175°	819	817	817	820	816	78
180°	821	821	821	821	821	



TEST NUMBER: P333379-935

CATALOG NUMBER: S125DIW-S610D770U935-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3
2.5°	668.8	668.6	668.4	668.1	667.9	667.4	666.6	665.7	665.0	664.1	665.0
5°	667.3	666.9	666.7	666.4	666.1	665.5	664.4	663.4	662.4	661.3	662.5
7.5°	661.3	661.2	661.2	661.0	660.9	660.3	659.3	658.2	657.2	656.2	657.1
10°	656.2	656.2	656.2	656.2	656.2	655.6	654.4	653.2	652.0	650.9	651.9
12.5°	648.8	648.9	649.0	649.2	649.3	648.8	647.9	647.0	646.1	645.1	645.9
15°	637.1	637.3	637.5	637.6	637.7	637.3	636.3	635.2	634.3	633.3	634.1
17.5°	622.0	622.2	622.6	622.8	623.2	622.8	621.8	620.8	619.7	618.7	619.4
20°	611.0	611.3	611.6	611.9	612.2	611.8	610.8	609.8	608.7	607.7	608.1
22.5°	598.5	599.0	599.5	600.0	600.5	600.2	599.1	598.0	596.8	595.7	596.2
25°	578.9	579.4	579.8	580.2	580.7	580.5	579.6	578.8	577.8	577.0	577.6
27.5°	557.2	557.8	558.5	559.1	559.8	559.6	558.6	557.7	556.6	555.7	556.0
30°	541.0	541.9	542.8	543.6	544.5	544.5	543.6	542.8	541.9	541.0	541.3
32.5°	526.3	527.1	527.9	528.7	529.3	529.4	528.8	528.1	527.5	526.8	527.2
35°	501.1	502.1	503.2	504.1	505.1	505.5	505.1	504.5	504.1	503.7	504.1
37.5°	475.9	476.8	477.7	478.6	479.6	479.9	479.8	479.7	479.5	479.4	479.9
40°	458.6	459.8	460.9	462.1	463.2	463.7	463.6	463.5	463.3	463.1	463.7
42.5°	439.7	441.3	442.7	444.3	445.8	446.7	447.0	447.4	447.6	448.0	448.7
45°	412.8	414.4	415.9	417.6	419.2	420.3	421.1	421.8	422.5	423.3	424.3
47.5°	385.2	386.7	388.1	389.6	391.2	392.4	393.7	394.9	396.2	397.4	399.0
50°	366.4	367.9	369.5	371.2	372.7	374.4	375.9	377.5	379.1	380.7	382.4
52.5°	346.5	348.4	350.3	352.3	354.2	356.2	358.2	360.1	362.1	363.9	365.7
55°	317.3	319.6	321.9	324.3	326.6	328.9	331.2	333.6	335.9	338.2	339.8
57.5°	287.5	290.2	293.0	295.8	298.6	301.4	304.0	306.7	309.4	312.0	313.8
60°	267.6	270.4	273.4	276.3	279.2	282.1	285.0	287.9	290.8	293.7	295.9
62.5°	248.2	251.1	254.0	256.9	259.8	262.9	266.0	269.1	272.2	275.4	277.8
65°	218.5	221.9	225.2	228.5	231.9	235.3	238.8	242.3	245.7	249.3	251.4
67.5°	190.5	193.7	196.9	200.2	203.4	206.8	210.3	213.9	217.4	221.0	223.6
70°	170.0	173.4	176.8	180.1	183.5	187.0	190.8	194.6	198.4	202.2	204.9
72.5°	150.2	153.7	157.1	160.6	164.0	167.8	171.9	176.1	180.2	184.3	187.4
75°	120.4	124.2	127.9	131.7	135.5	139.7	144.4	149.0	153.7	158.3	161.2
77.5°	91.7	96.1	100.5	104.8	109.2	113.6	118.0	122.5	127.0	131.5	134.7
80°	74.0	78.3	82.7	87.0	91.4	96.0	101.0	105.9	110.8	115.8	119.0
82.5°	57.7	62.3	66.9	71.5	76.1	80.9	85.9	91.0	96.1	101.2	104.2
85°	36.0	40.8	45.5	50.4	55.2	60.1	65.2	70.3	75.3	80.5	83.7
87.5°	20.6	25.4	30.3	35.2	40.0	45.0	50.2	55.4	60.5	65.6	69.1
90°	11.1	16.9	22.6	28.5	34.3	40.1	46.1	52.0	57.9	63.9	67.9
92.5°	24.9	30.0	35.0	40.2	45.3	51.0	57.3	63.5	69.8	76.1	80.2
95°	50.0	54.1	58.2	62.3	66.3	71.5	77.9	84.2	90.6	96.9	101.2
97.5°	76.7	80.2	83.8	87.3	90.8	95.9	102.6	109.3	116.1	122.9	126.8
100°	96.7	99.7	102.8	105.8	108.9	113.7	120.2	126.7	133.2	139.7	144.0
102.5°	118.1	121.6	124.9	128.3	131.7	136.1	141.6	147.1	152.6	158.0	162.4
105°	151.6	154.6	157.6	160.7	163.8	167.9	173.1	178.3	183.6	188.7	192.5
107.5°	188.6	191.3	194.1	196.7	199.4	203.2	208.0	212.8	217.7	222.6	225.8
110°	214.2	216.7	219.1	221.6	224.0	227.5	232.0	236.5	241.0	245.5	248.7



TEST NUMBER: P333379-935

CATALOG NUMBER: S125DIW-S610D770U935-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	240.8	242.5	244.4	246.1	247.9	251.0	255.5	260.0	264.5	269.0	271.8
115°	279.4	281.0	282.6	284.1	285.8	288.6	292.7	296.7	300.7	304.8	307.3
117.5°	318.1	319.1	319.9	320.9	321.8	324.2	328.0	331.8	335.7	339.5	342.1
120°	342.7	343.8	344.9	346.1	347.2	349.6	353.0	356.5	360.0	363.5	366.0
122.5°	368.8	369.2	369.6	370.1	370.6	372.6	376.2	379.8	383.4	387.0	389.3
125°	404.7	405.4	406.0	406.7	407.5	409.3	412.4	415.4	418.5	421.5	423.6
127.5°	442.4	442.6	443.0	443.3	443.7	445.1	447.7	450.2	452.8	455.4	457.4
130°	465.4	465.9	466.5	467.0	467.6	469.1	471.4	473.7	476.0	478.4	480.3
132.5°	487.8	489.0	490.1	491.3	492.4	493.7	495.2	496.7	498.3	499.7	501.6
135°	524.2	524.9	525.6	526.2	526.9	527.9	529.1	530.2	531.4	532.5	534.4
137.5°	558.3	559.0	559.6	560.4	561.1	561.9	562.7	563.4	564.3	565.1	567.0
140°	579.7	580.5	581.2	581.9	582.6	583.2	583.8	584.4	585.0	585.5	587.4
142.5°	601.8	602.2	602.7	603.1	603.6	604.2	604.8	605.3	605.9	606.4	608.0
145°	634.0	634.5	634.9	635.3	635.8	636.2	636.6	637.1	637.5	637.9	638.6
147.5°	663.3	663.7	663.9	664.3	664.6	664.9	665.2	665.6	665.9	666.2	666.8
150°	683.3	683.1	682.9	682.9	682.7	682.9	683.5	684.1	684.6	685.2	685.2
152.5°	699.6	699.8	700.0	700.3	700.4	700.6	700.9	701.1	701.3	701.5	701.9
155°	724.8	724.8	724.8	724.8	724.8	724.9	725.0	725.1	725.3	725.5	726.0
157.5°	747.3	747.0	746.7	746.4	746.1	746.0	746.1	746.2	746.4	746.6	747.1
160°	760.6	760.2	759.7	759.3	758.9	758.7	758.9	759.1	759.1	759.3	759.9
162.5°	772.4	772.1	771.7	771.5	771.1	770.9	771.0	771.0	771.0	771.1	771.8
165°	788.1	787.8	787.6	787.2	787.0	786.9	787.0	787.1	787.3	787.5	788.0
167.5°	801.4	800.8	800.2	799.7	799.1	798.8	798.8	798.8	798.8	798.8	799.7
170°	808.6	808.0	807.4	806.8	806.2	806.0	806.0	806.0	806.0	806.0	806.8
172.5°	813.6	813.0	812.5	811.9	811.4	811.1	811.1	811.1	811.1	811.1	811.9
175°	819.4	818.8	818.3	817.7	817.1	816.8	816.8	816.8	816.8	816.8	817.7
177.5°	822.3	821.9	821.4	821.0	820.5	820.3	820.1	820.0	819.9	819.8	820.4
180°	821.3	821.3	821.3	821.3	821.3	821.3	821.3	821.3	821.3	821.3	821.3



TEST NUMBER: P333379-935

CATALOG NUMBER: S125DIW-S610D770U935-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	667.3	667.3	667.3	667.3	667.3	667.3	667.3	667.3
2.5°	665.7	666.6	667.4	667.7	667.6	667.5	667.4	667.3
5°	663.7	664.9	666.0	666.5	666.4	666.2	666.1	666.0
7.5°	658.1	659.2	660.2	660.6	660.5	660.4	660.2	660.0
10°	653.0	653.9	655.0	655.4	655.3	655.1	655.0	654.8
12.5°	646.7	647.5	648.3	648.5	648.1	647.7	647.4	647.0
15°	635.0	635.8	636.7	636.9	636.3	635.7	635.2	634.6
17.5°	620.1	620.7	621.4	621.6	621.2	620.9	620.5	620.2
20°	608.6	609.1	609.5	609.7	609.7	609.7	609.7	609.7
22.5°	596.8	597.4	597.9	598.0	597.6	597.3	596.9	596.6
25°	578.2	578.8	579.3	579.3	578.5	577.8	577.0	576.4
27.5°	556.5	556.9	557.3	557.3	557.1	556.8	556.6	556.3
30°	541.6	541.9	542.2	542.3	542.1	541.9	541.8	541.7
32.5°	527.4	527.7	528.1	528.1	528.0	527.8	527.7	527.5
35°	504.5	505.1	505.5	505.7	505.7	505.7	505.7	505.7
37.5°	480.5	481.1	481.7	482.0	481.9	481.8	481.8	481.7
40°	464.3	464.9	465.5	465.9	466.2	466.5	466.8	467.1
42.5°	449.4	450.0	450.7	451.2	451.3	451.3	451.3	451.4
45°	425.2	426.3	427.3	427.9	428.1	428.2	428.3	428.5
47.5°	400.5	401.9	403.4	404.3	404.7	404.9	405.3	405.6
50°	383.9	385.6	387.1	388.1	388.6	389.0	389.4	389.9
52.5°	367.4	369.1	370.8	371.9	372.2	372.5	372.8	373.2
55°	341.4	343.0	344.6	345.7	346.3	346.9	347.4	348.0
57.5°	315.7	317.5	319.3	320.5	321.0	321.4	321.8	322.3
60°	298.1	300.2	302.5	303.8	304.2	304.6	305.1	305.5
62.5°	280.3	282.7	285.1	286.5	287.1	287.7	288.2	288.8
65°	253.6	255.8	258.0	259.3	259.9	260.5	261.1	261.7
67.5°	226.3	228.9	231.5	233.2	234.0	234.8	235.6	236.3
70°	207.7	210.4	213.2	215.0	215.9	216.7	217.7	218.5
72.5°	190.4	193.3	196.3	198.1	198.8	199.4	200.1	200.7
75°	164.1	167.0	170.0	171.8	172.5	173.2	173.9	174.7
77.5°	137.8	141.1	144.3	146.2	146.7	147.3	147.9	148.5
80°	122.2	125.4	128.5	130.4	131.0	131.6	132.2	132.8
82.5°	107.3	110.4	113.5	115.5	116.6	117.6	118.6	119.7
85°	86.9	90.1	93.2	95.4	96.6	97.7	98.9	100.0
87.5°	72.6	76.1	79.6	81.9	83.0	84.0	85.2	86.3
90°	72.0	76.0	80.1	82.8	84.3	85.8	87.1	88.6
92.5°	84.5	88.6	92.7	95.5	96.9	98.2	99.5	100.8
95°	105.4	109.5	113.7	116.5	117.8	119.1	120.4	121.7
97.5°	130.8	134.8	138.8	141.4	142.6	143.7	144.8	146.0
100°	148.4	152.7	157.0	159.7	160.9	162.0	163.2	164.4
102.5°	166.7	171.0	175.3	178.1	179.4	180.6	181.9	183.2
105°	196.2	200.0	203.8	206.4	207.8	209.3	210.7	212.2
107.5°	229.1	232.5	235.7	237.8	238.8	239.6	240.5	241.3
110°	251.8	255.0	258.3	260.3	261.1	262.0	262.9	263.8





TEST NUMBER: P333379-935

CATALOG NUMBER: S125DIW-S610D770U935-4F0-1E-UDD-D1

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	274.7	277.5	280.3	282.1	282.9	283.7	284.5	285.2
115°	309.8	312.3	314.7	316.3	317.0	317.8	318.5	319.3
117.5°	344.7	347.2	349.8	351.4	351.8	352.2	352.7	353.0
120°	368.4	370.9	373.4	374.8	375.1	375.4	375.7	376.0
122.5°	391.5	393.7	396.0	397.3	397.7	398.1	398.6	399.0
125°	425.7	427.7	429.7	431.0	431.6	432.2	432.8	433.3
127.5°	459.3	461.4	463.4	464.7	465.2	465.8	466.3	466.9
130°	482.2	484.1	485.9	487.1	487.5	487.9	488.4	488.9
132.5°	503.5	505.4	507.3	508.4	508.6	508.9	509.0	509.2
135°	536.3	538.2	540.1	541.1	541.3	541.5	541.6	541.7
137.5°	568.9	570.8	572.7	573.5	573.3	573.3	573.1	573.0
140°	589.3	591.2	593.1	593.9	593.7	593.7	593.5	593.4
142.5°	609.5	611.1	612.6	613.3	613.2	613.0	612.9	612.8
145°	639.4	640.1	640.8	641.3	641.4	641.5	641.7	641.9
147.5°	667.4	668.0	668.6	668.5	667.8	667.1	666.4	665.6
150°	685.2	685.2	685.2	685.1	685.0	684.8	684.7	684.6
152.5°	702.2	702.6	702.9	702.8	702.3	701.9	701.4	700.9
155°	726.6	727.1	727.7	727.6	726.9	726.3	725.5	724.8
157.5°	747.7	748.2	748.8	748.6	747.7	746.7	745.8	744.9
160°	760.4	761.0	761.6	761.6	760.8	760.1	759.4	758.7
162.5°	772.5	773.1	773.8	773.8	772.9	772.1	771.3	770.4
165°	788.6	789.2	789.7	789.5	788.8	787.9	787.0	786.2
167.5°	800.6	801.4	802.2	802.2	801.3	800.5	799.6	798.7
170°	807.7	808.6	809.4	809.3	808.3	807.4	806.3	805.4
172.5°	812.8	813.6	814.5	814.5	813.6	812.7	811.8	811.0
175°	818.6	819.4	820.3	820.2	819.2	818.2	817.2	816.2
177.5°	821.1	821.8	822.5	822.4	821.7	820.9	820.1	819.2
180°	821.3	821.3	821.3	821.3	821.3	821.3	821.3	821.3

(END OF REPORT)