

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: P333217-935

Luminaire Tested: **S125DIP-S850D590U935-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333217-935
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-S850D590U935-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4861.4 lumens
Efficiency: N/A
Efficacy: 120.6 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

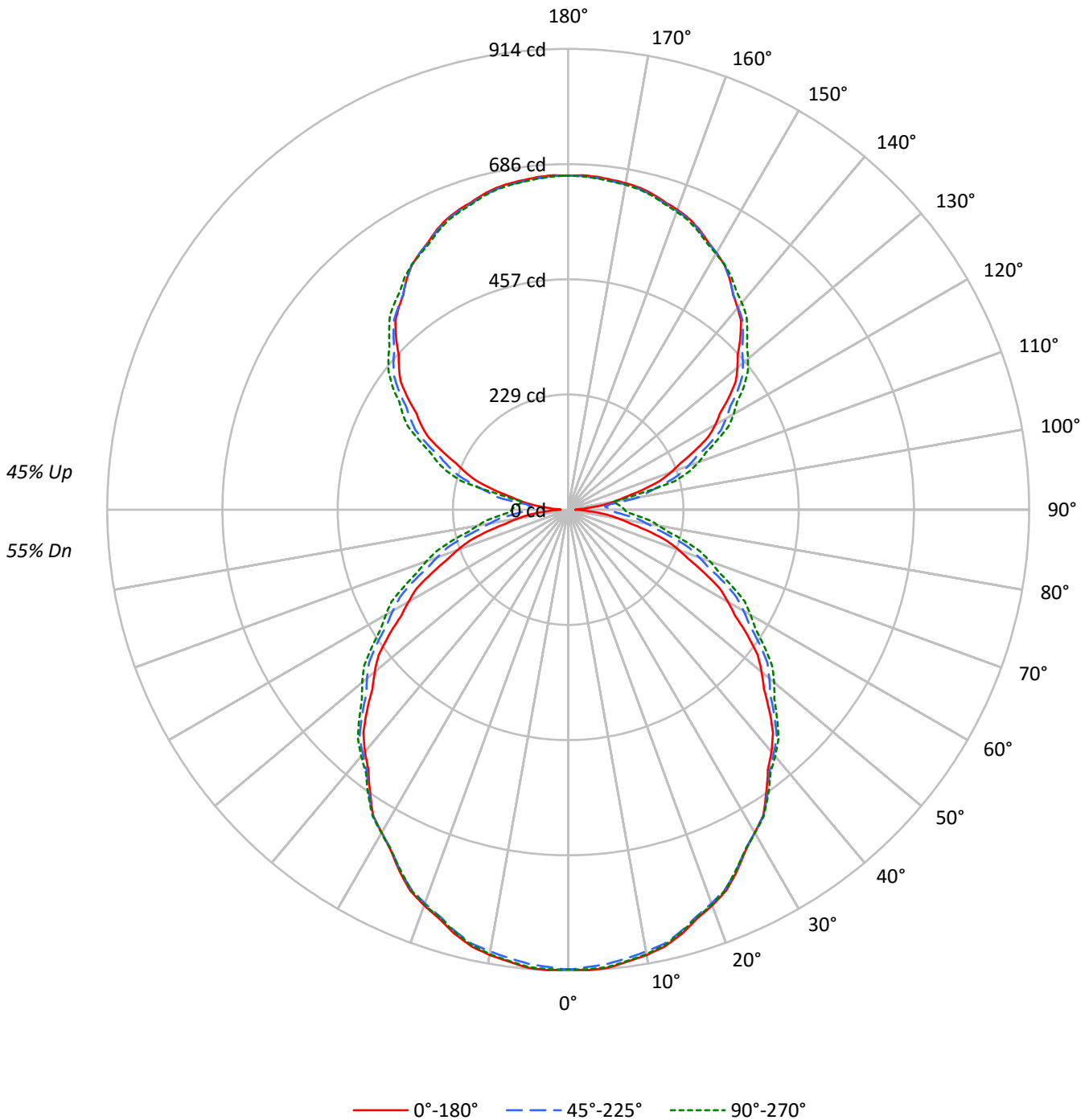
Input Watts (W): 40.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333217-935

CATALOG NUMBER: S125DIP-S850D590U935-4F0-1E-UDD-D

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	108	108	108	108	100	100	100	100	86	86	86	73	73	73	60	60	60	55
1	98	93	89	85	91	87	83	80	74	71	69	63	61	59	52	51	49	44
2	89	81	74	69	82	75	70	65	64	60	56	55	51	48	45	43	41	36
3	81	71	63	57	75	66	59	54	57	51	47	48	44	41	40	37	34	31
4	74	63	54	48	68	58	51	45	50	44	40	43	38	35	36	32	30	26
5	68	56	47	41	63	52	44	39	45	39	34	38	34	30	32	28	26	22
6	62	50	42	36	58	47	39	34	40	34	30	34	30	26	29	25	22	20
7	58	45	37	31	53	42	35	29	37	31	26	31	27	23	26	23	20	17
8	54	41	33	27	50	38	31	26	33	27	23	29	24	20	24	21	18	15
9	50	37	30	24	46	35	28	23	31	25	21	26	22	18	22	19	16	14
10	47	34	27	22	43	32	25	21	28	23	19	24	20	17	21	17	15	13

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5891	5891	5891
5°	5902	5782	5800
10°	5860	5679	5670
15°	5791	5555	5505
20°	5697	5402	5339
25°	5585	5239	5135
30°	5449	5059	4950
35°	5322	4893	4780
40°	5194	4719	4609
45°	5048	4570	4458
50°	4910	4408	4325
55°	4742	4256	4166
60°	4560	4082	4006
65°	4369	3900	3826
70°	4153	3651	3640
75°	3809	3412	3412
80°	3363	3122	3163
85°	2945	2924	3085



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.2	1.8
10°-20°	244.8	5.0
20°-30°	364.1	7.5
30°-40°	431.3	8.9
40°-50°	445.9	9.2
50°-60°	410.8	8.4
60°-70°	332.0	6.8
70°-80°	222.4	4.6
80°-90°	116.7	2.4
90°-100°	88.8	1.8
100°-110°	196.1	4.0
110°-120°	301.1	6.2
120°-130°	363.6	7.5
130°-140°	379.5	7.8
140°-150°	350.4	7.2
150°-160°	282.1	5.8
160°-170°	182.5	3.8
170°-180°	62.9	1.3
0°-30°	695.2	14.3
0°-40°	1126.5	23.2
0°-60°	1983.2	40.8
0°-90°	2654.3	54.6
90°-120°	586.1	12.1
90°-150°	1679.5	34.5
90°-180°	2207.0	45.4
0°-180°	4861.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	912	912	912	912	912	
5°	912	910	904	911	910	86
15°	871	872	866	870	867	245
25°	791	794	789	792	788	364
35°	685	691	688	691	691	428
45°	564	574	578	584	586	435
55°	434	448	462	472	476	388
65°	299	319	341	354	358	296
75°	164	188	216	234	239	175
85°	49	79	110	129	137	52
90°	15	47	81	103	112	11
95°	40	61	73	94	102	45
105°	152	169	196	213	219	162
115°	277	286	309	322	326	274
125°	389	393	410	421	425	347
135°	483	485	490	500	502	372
145°	558	558	558	563	564	349
155°	614	611	612	613	610	283
165°	648	645	646	648	644	183
175°	663	660	660	664	660	63
180°	663	663	663	663	663	



TEST NUMBER: P333217-935

CATALOG NUMBER: S125DIP-S850D590U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1
2.5°	914.2	914.0	913.6	913.3	912.9	912.2	911.1	910.0	908.9	907.8	908.9
5°	912.1	911.7	911.3	910.9	910.5	909.6	908.2	906.8	905.4	904.0	905.6
7.5°	904.0	903.9	903.7	903.5	903.4	902.6	901.2	899.7	898.3	896.9	898.3
10°	896.9	896.9	896.9	896.9	896.9	896.1	894.5	892.9	891.3	889.8	891.1
12.5°	886.8	887.0	887.2	887.3	887.5	886.9	885.7	884.4	883.1	881.8	883.0
15°	871.0	871.2	871.3	871.5	871.8	871.2	869.8	868.4	866.9	865.6	866.8
17.5°	850.2	850.6	851.0	851.4	851.8	851.3	849.9	848.5	847.1	845.8	846.6
20°	835.2	835.6	835.9	836.4	836.8	836.3	834.9	833.5	832.1	830.7	831.3
22.5°	818.0	818.7	819.4	820.2	820.9	820.4	818.9	817.3	815.8	814.2	815.0
25°	791.3	791.9	792.6	793.2	793.8	793.4	792.3	791.1	789.9	788.7	789.5
27.5°	761.6	762.6	763.4	764.3	765.2	764.9	763.6	762.2	760.9	759.6	760.1
30°	739.5	740.7	741.9	743.0	744.2	744.2	743.0	741.9	740.7	739.5	739.9
32.5°	719.5	720.5	721.5	722.6	723.6	723.7	722.8	721.9	721.1	720.2	720.6
35°	684.9	686.4	687.8	689.1	690.5	691.0	690.3	689.7	689.1	688.5	689.1
37.5°	650.4	651.7	653.0	654.3	655.6	656.1	655.8	655.7	655.5	655.3	656.1
40°	626.8	628.4	630.0	631.6	633.2	633.9	633.7	633.5	633.3	633.1	633.9
42.5°	601.1	603.1	605.2	607.3	609.3	610.6	611.1	611.5	611.9	612.3	613.3
45°	564.2	566.5	568.6	570.8	573.0	574.5	575.6	576.5	577.6	578.5	580.0
47.5°	526.5	528.6	530.5	532.6	534.6	536.5	538.2	539.9	541.6	543.3	545.4
50°	500.8	502.9	505.1	507.3	509.5	511.7	513.8	516.1	518.2	520.4	522.6
52.5°	473.6	476.2	478.9	481.6	484.2	486.9	489.6	492.2	494.9	497.6	499.9
55°	433.7	436.9	440.1	443.2	446.4	449.6	452.8	456.0	459.1	462.3	464.5
57.5°	392.9	396.7	400.5	404.3	408.2	411.9	415.6	419.2	422.8	426.5	429.0
60°	365.8	369.7	373.7	377.6	381.6	385.6	389.6	393.6	397.5	401.5	404.5
62.5°	339.2	343.2	347.2	351.2	355.2	359.3	363.6	367.9	372.1	376.4	379.8
65°	298.7	303.2	307.8	312.4	316.9	321.6	326.4	331.1	336.0	340.7	343.7
67.5°	260.4	264.8	269.2	273.6	278.0	282.7	287.5	292.4	297.2	302.0	305.7
70°	232.5	237.0	241.6	246.2	250.8	255.6	260.8	266.0	271.1	276.3	280.1
72.5°	205.3	210.0	214.7	219.5	224.2	229.4	235.1	240.7	246.3	252.0	256.1
75°	164.5	169.7	174.9	180.0	185.2	191.0	197.3	203.7	210.0	216.4	220.3
77.5°	125.4	131.3	137.3	143.3	149.2	155.2	161.4	167.5	173.6	179.8	184.1
80°	101.1	107.0	113.0	118.9	124.9	131.2	138.0	144.7	151.5	158.3	162.6
82.5°	78.9	85.2	91.4	97.7	104.0	110.6	117.5	124.4	131.3	138.3	142.5
85°	49.2	55.7	62.3	68.9	75.4	82.1	89.1	96.1	103.1	109.9	114.3
87.5°	28.0	34.5	41.1	47.6	54.2	60.9	67.8	74.6	81.5	88.5	93.2
90°	14.8	22.0	29.3	36.5	43.7	51.1	58.6	66.1	73.7	81.2	86.3
92.5°	20.4	25.7	31.0	36.2	41.5	48.0	55.5	63.1	70.7	78.4	83.3
95°	39.6	44.4	49.3	54.2	59.0	62.7	65.3	67.9	70.5	73.1	78.1
97.5°	69.0	74.2	79.5	84.7	90.0	91.8	90.1	88.3	86.7	85.0	86.1
100°	91.9	96.3	100.9	105.4	109.9	115.5	122.3	129.2	135.9	142.7	130.6
102.5°	115.1	119.4	123.6	127.9	132.2	137.6	144.0	150.5	157.0	163.4	164.4
105°	152.5	156.1	159.7	163.3	166.9	171.7	177.7	183.7	189.6	195.5	199.6
107.5°	191.3	194.0	196.7	199.4	202.1	206.4	212.3	218.3	224.2	230.1	234.1
110°	216.5	218.9	221.3	223.7	226.0	230.1	235.9	241.7	247.5	253.2	256.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	240.9	243.1	245.2	247.4	249.5	253.4	258.9	264.5	270.0	275.5	278.8
115°	276.6	278.4	280.4	282.3	284.3	287.9	293.2	298.4	303.7	309.0	312.1
117.5°	313.5	314.4	315.2	316.2	317.0	320.1	325.5	330.7	336.0	341.3	344.1
120°	337.0	337.5	338.0	338.5	339.0	341.6	346.6	351.5	356.4	361.3	364.5
122.5°	357.1	357.8	358.5	359.2	359.9	362.6	367.1	371.7	376.3	380.8	383.8
125°	389.2	389.8	390.3	390.9	391.5	393.7	397.7	401.7	405.6	409.7	412.3
127.5°	419.0	419.4	419.7	420.1	420.4	422.2	425.4	428.6	431.8	435.0	437.6
130°	437.9	438.2	438.6	438.9	439.3	440.9	443.8	446.7	449.6	452.5	455.0
132.5°	456.1	456.7	457.3	457.9	458.4	459.7	461.6	463.5	465.4	467.4	470.0
135°	482.7	483.2	483.6	484.1	484.6	485.3	486.6	487.7	488.9	490.0	492.4
137.5°	507.2	507.6	508.0	508.4	508.9	509.3	509.7	510.2	510.7	511.2	513.6
140°	522.6	522.8	523.1	523.2	523.5	523.6	523.7	523.8	523.9	524.0	526.4
142.5°	537.1	537.1	537.1	537.0	537.0	537.1	537.3	537.5	537.7	537.9	539.8
145°	558.4	558.4	558.4	558.5	558.5	558.5	558.5	558.5	558.5	558.5	559.6
147.5°	576.2	576.2	576.1	576.1	576.0	576.1	576.2	576.4	576.4	576.6	577.0
150°	588.0	587.8	587.5	587.4	587.1	587.1	587.4	587.5	587.8	588.0	588.2
152.5°	599.4	598.9	598.5	598.0	597.4	597.4	597.5	597.8	598.0	598.2	598.5
155°	614.1	613.4	612.8	612.1	611.4	611.2	611.4	611.7	611.8	612.1	612.4
157.5°	625.3	624.9	624.6	624.1	623.8	623.6	623.6	623.6	623.6	623.7	624.1
160°	633.2	632.6	631.9	631.2	630.6	630.3	630.4	630.5	630.6	630.8	631.2
162.5°	639.5	638.9	638.2	637.5	636.9	636.6	636.7	636.8	636.9	637.1	637.7
165°	647.9	647.3	646.6	646.0	645.3	645.1	645.1	645.2	645.4	645.5	646.1
167.5°	654.2	653.6	652.9	652.2	651.5	651.3	651.3	651.4	651.5	651.7	652.5
170°	657.8	657.0	656.3	655.5	654.7	654.4	654.4	654.6	654.7	654.8	655.7
172.5°	660.1	659.4	658.6	657.8	657.0	656.8	656.9	657.2	657.4	657.5	658.3
175°	662.7	662.0	661.3	660.7	660.0	659.8	659.9	660.0	660.1	660.2	661.1
177.5°	663.8	663.3	662.8	662.3	661.8	661.5	661.6	661.7	661.8	661.9	662.5
180°	662.7	662.7	662.7	662.7	662.7	662.7	662.7	662.7	662.7	662.7	662.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	912.1	912.1	912.1	912.1	912.1	912.1	912.1	912.1
2.5°	910.0	911.1	912.2	912.7	912.6	912.4	912.2	912.1
5°	907.2	908.8	910.4	911.1	910.9	910.7	910.5	910.3
7.5°	899.7	901.0	902.4	903.0	902.8	902.7	902.4	902.2
10°	892.5	893.9	895.3	895.9	895.7	895.5	895.3	895.1
12.5°	884.0	885.1	886.1	886.4	885.9	885.4	884.8	884.3
15°	868.0	869.2	870.4	870.6	869.8	868.9	868.1	867.4
17.5°	847.6	848.5	849.4	849.6	849.1	848.7	848.2	847.7
20°	831.9	832.5	833.1	833.4	833.4	833.4	833.4	833.4
22.5°	815.8	816.5	817.3	817.4	816.9	816.5	816.0	815.5
25°	790.3	791.1	791.9	791.8	790.7	789.8	788.8	787.8
27.5°	760.6	761.2	761.7	761.9	761.5	761.1	760.8	760.4
30°	740.3	740.7	741.1	741.2	741.0	740.8	740.6	740.4
32.5°	721.0	721.3	721.8	721.9	721.7	721.5	721.3	721.1
35°	689.7	690.3	691.0	691.2	691.2	691.2	691.2	691.2
37.5°	656.9	657.6	658.4	658.8	658.8	658.7	658.6	658.5
40°	634.6	635.5	636.3	636.9	637.2	637.7	638.1	638.4
42.5°	614.2	615.2	616.1	616.6	616.7	616.8	616.9	617.0
45°	581.3	582.7	584.1	584.9	585.1	585.3	585.5	585.7
47.5°	547.3	549.4	551.4	552.7	553.1	553.5	554.0	554.4
50°	524.8	527.0	529.2	530.5	531.2	531.8	532.4	533.0
52.5°	502.2	504.5	506.9	508.3	508.8	509.2	509.6	510.1
55°	466.7	468.9	471.1	472.5	473.3	474.2	474.9	475.7
57.5°	431.5	434.0	436.5	438.1	438.7	439.3	439.9	440.5
60°	407.4	410.4	413.5	415.2	415.8	416.4	417.0	417.6
62.5°	383.1	386.3	389.7	391.7	392.4	393.2	393.9	394.7
65°	346.6	349.7	352.6	354.5	355.3	356.1	356.9	357.7
67.5°	309.3	312.9	316.5	318.8	319.9	320.9	321.9	323.0
70°	283.9	287.7	291.4	293.9	295.1	296.3	297.5	298.7
72.5°	260.2	264.2	268.4	270.9	271.7	272.6	273.5	274.3
75°	224.4	228.3	232.3	234.8	235.7	236.8	237.7	238.8
77.5°	188.5	192.9	197.3	199.8	200.6	201.4	202.2	203.0
80°	167.0	171.4	175.7	178.3	179.2	179.9	180.7	181.5
82.5°	146.6	150.8	155.1	157.9	159.4	160.7	162.2	163.7
85°	118.7	123.1	127.5	130.4	132.1	133.6	135.3	136.8
87.5°	97.8	102.5	107.2	110.3	111.8	113.2	114.7	116.1
90°	91.4	96.5	101.7	105.0	106.8	108.5	110.2	111.9
92.5°	88.3	93.2	98.2	101.4	103.0	104.5	106.1	107.5
95°	83.0	87.9	92.8	96.0	97.4	98.8	100.1	101.5
97.5°	87.1	88.3	89.4	90.6	92.0	93.2	94.6	96.0
100°	118.6	106.4	94.4	88.7	89.5	90.1	90.9	91.7
102.5°	165.3	166.3	167.2	164.5	158.3	152.1	145.9	139.6
105°	203.5	207.5	211.5	214.1	215.3	216.6	217.9	219.2
107.5°	238.1	242.0	246.0	248.4	249.3	250.2	251.2	252.0
110°	260.2	263.6	267.1	269.5	271.0	272.5	274.1	275.5



TEST NUMBER: P333217-935

CATALOG NUMBER: S125DIP-S850D590U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	282.0	285.2	288.3	290.6	291.8	293.1	294.3	295.5
115°	315.3	318.4	321.6	323.4	323.9	324.4	325.0	325.5
117.5°	347.0	349.7	352.6	354.5	355.6	356.6	357.7	358.8
120°	367.6	370.7	373.9	375.8	376.4	377.1	377.7	378.4
122.5°	386.8	389.8	392.8	394.6	395.1	395.7	396.2	396.8
125°	415.1	417.8	420.6	422.3	422.9	423.6	424.3	425.0
127.5°	440.4	443.1	445.8	447.3	447.6	448.0	448.3	448.7
130°	457.4	459.9	462.3	463.7	464.2	464.7	465.1	465.5
132.5°	472.8	475.4	478.2	479.7	480.0	480.3	480.5	480.9
135°	494.7	497.1	499.5	500.8	501.2	501.5	501.9	502.2
137.5°	516.0	518.3	520.7	522.0	522.3	522.5	522.7	523.0
140°	528.7	531.2	533.6	534.9	535.0	535.1	535.3	535.5
142.5°	541.7	543.6	545.5	546.6	546.6	546.8	547.0	547.1
145°	560.8	561.8	562.9	563.5	563.7	563.9	564.0	564.1
147.5°	577.5	578.0	578.4	578.4	578.0	577.6	577.1	576.7
150°	588.4	588.7	588.8	588.7	588.0	587.3	586.6	585.9
152.5°	598.7	598.9	599.1	598.8	598.1	597.4	596.6	595.8
155°	612.8	613.0	613.4	613.1	612.3	611.4	610.5	609.6
157.5°	624.4	624.7	625.1	624.8	624.0	623.0	622.2	621.3
160°	631.6	632.1	632.5	632.2	631.4	630.5	629.6	628.8
162.5°	638.3	638.9	639.5	639.3	638.3	637.4	636.5	635.4
165°	646.8	647.5	648.1	648.0	647.1	646.3	645.4	644.5
167.5°	653.2	654.0	654.8	654.7	653.8	652.7	651.8	650.7
170°	656.6	657.5	658.3	658.2	657.3	656.3	655.3	654.4
172.5°	659.1	660.0	660.7	660.6	659.6	658.7	657.6	656.7
175°	661.9	662.8	663.7	663.7	662.7	661.7	660.7	659.7
177.5°	663.1	663.7	664.3	664.3	663.6	662.9	662.2	661.5
180°	662.7	662.7	662.7	662.7	662.7	662.7	662.7	662.7

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