

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: P333209-935

Luminaire Tested: **S125DIP-S850D365U935-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333209-935
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: S125DIP-S850D365U935-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3917.0 lumens
Efficiency: N/A
Efficacy: 111.9 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-Direct

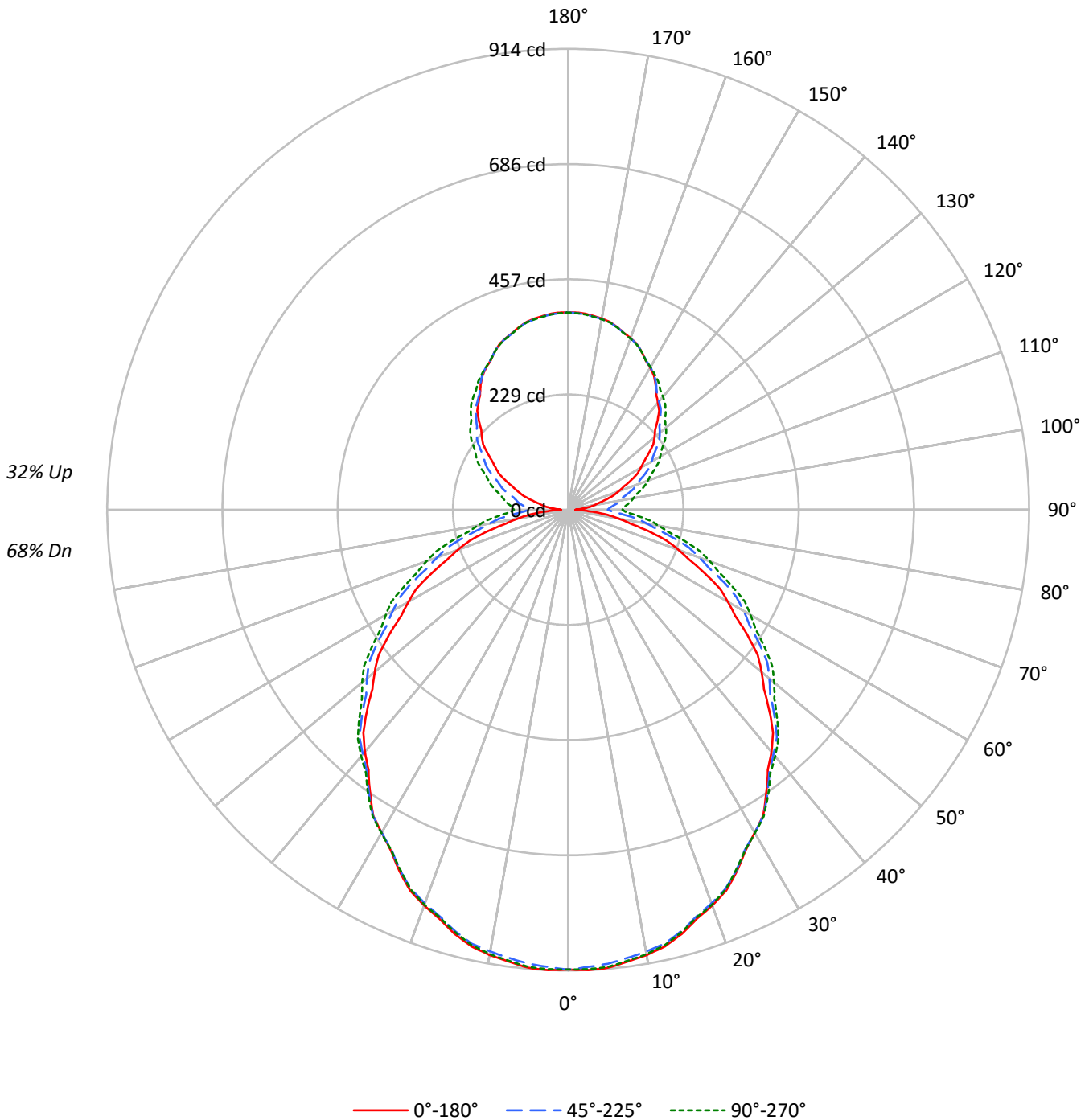
Input Watts (W): 35
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333209-935

CATALOG NUMBER: S125DIP-S850D365U935-4F0-1E-UDD-D1

Luminous Intensity Polar Plot





TEST NUMBER: P333209-935

CATALOG NUMBER: S125DIP-S850D365U935-4F0-1E-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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	68
1	101	96	91	88	95	90	87	83	80	77	75	71	69	67	62	61	59	55
2	91	83	76	71	86	79	73	67	70	65	61	62	58	55	54	52	49	45
3	83	73	65	59	78	69	62	56	61	56	51	54	50	46	48	44	41	38
4	76	64	56	49	71	61	53	47	54	48	43	48	43	39	43	39	35	32
5	70	57	49	42	65	54	46	41	49	42	37	43	38	34	38	34	31	28
6	64	51	43	37	60	49	41	35	44	37	32	39	34	30	35	30	27	24
7	59	46	38	32	56	44	36	31	40	33	29	36	30	26	32	27	24	21
8	55	42	34	28	52	40	33	27	36	30	25	33	27	23	29	25	21	19
9	51	39	31	25	48	37	30	25	33	27	23	30	25	21	27	22	19	17
10	48	35	28	23	45	34	27	22	31	25	21	28	23	19	25	21	18	16

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



TEST NUMBER: P333209-935

CATALOG NUMBER: S125DIP-S850D365U935-4F0-1E-UDD-D1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.2	2.2
10°-20°	244.8	6.3
20°-30°	364.1	9.3
30°-40°	431.3	11.0
40°-50°	445.9	11.4
50°-60°	410.8	10.5
60°-70°	332.0	8.5
70°-80°	222.4	5.7
80°-90°	116.2	3.0
90°-100°	90.9	2.3
100°-110°	125.1	3.2
110°-120°	163.0	4.2
120°-130°	190.6	4.9
130°-140°	201.1	5.1
140°-150°	190.9	4.9
150°-160°	159.0	4.1
160°-170°	105.7	2.7
170°-180°	37.0	0.9
0°-30°	695.2	17.7
0°-40°	1126.5	28.8
0°-60°	1983.2	50.6
0°-90°	2653.8	67.7
90°-120°	378.9	9.7
90°-150°	961.5	24.5
90°-180°	1263.0	32.2
0°-180°	3917.0	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	46	78	99	108	11
95°	31	56	89	110	117	30
105°	77	94	122	141	149	83
115°	137	145	168	183	189	135
125°	195	197	214	227	232	174
135°	251	252	258	269	273	193
145°	302	303	304	308	311	189
155°	345	345	345	346	345	159
165°	375	375	375	376	374	106
175°	390	389	389	390	389	37
180°	391	391	391	391	391	



TEST NUMBER: P333209-935

CATALOG NUMBER: S125DIP-S850D365U935-4F0-1E-UDD-D1

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	34.4	40.9	47.4	53.8	60.5	67.3	74.2	81.0	87.9	92.6
90°	14.6	21.5	28.4	35.3	42.2	49.2	56.5	63.7	70.9	78.2	83.1
92.5°	20.2	26.5	32.8	39.0	45.3	52.2	59.7	67.2	74.6	82.1	87.0
95°	31.4	36.7	42.0	47.3	52.6	59.0	66.4	73.9	81.3	88.7	93.6
97.5°	43.4	48.1	52.9	57.5	62.3	68.3	75.8	83.2	90.7	98.2	102.7
100°	52.4	56.7	60.8	64.9	69.1	74.8	82.1	89.3	96.5	103.8	108.6
102.5°	62.2	66.3	70.4	74.6	78.7	84.1	90.7	97.4	104.0	110.6	115.4
105°	77.4	80.9	84.5	88.0	91.5	96.4	102.8	109.2	115.5	121.9	126.3
107.5°	94.4	97.4	100.5	103.5	106.5	111.1	117.1	123.1	129.2	135.2	139.3
110°	106.1	108.8	111.5	114.3	116.9	121.2	127.0	132.8	138.5	144.3	148.3



TEST NUMBER: P333209-935

CATALOG NUMBER: S125DIP-S850D365U935-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	118.7	120.8	122.9	125.0	127.1	131.0	136.6	142.2	147.9	153.6	157.3
115°	136.6	138.2	139.8	141.5	143.2	146.6	152.0	157.2	162.6	167.9	171.3
117.5°	154.4	155.4	156.4	157.5	158.5	161.5	166.5	171.6	176.6	181.6	185.0
120°	166.1	167.0	167.9	168.8	169.8	172.5	177.2	181.8	186.5	191.1	194.5
122.5°	178.0	178.4	178.8	179.2	179.6	182.1	186.7	191.3	195.9	200.4	203.6
125°	195.0	195.2	195.4	195.6	195.8	197.9	202.0	206.0	210.1	214.1	217.1
127.5°	212.3	212.4	212.4	212.4	212.5	214.1	217.5	220.8	224.2	227.6	230.4
130°	223.3	223.4	223.6	223.7	223.9	225.4	228.3	231.3	234.1	237.0	239.8
132.5°	233.6	234.1	234.5	235.1	235.6	236.9	239.0	241.2	243.3	245.4	248.1
135°	250.7	250.9	251.2	251.3	251.6	252.4	253.8	255.3	256.8	258.2	260.8
137.5°	266.8	267.1	267.3	267.5	267.8	268.3	269.1	269.9	270.8	271.6	274.1
140°	276.6	276.9	277.2	277.6	277.9	278.4	278.7	279.1	279.6	279.9	282.2
142.5°	287.1	287.2	287.3	287.5	287.6	287.7	288.1	288.3	288.7	289.0	290.9
145°	302.5	302.6	302.6	302.6	302.7	302.9	303.1	303.3	303.5	303.7	304.7
147.5°	315.8	316.0	316.1	316.2	316.4	316.6	316.8	316.9	317.0	317.2	317.7
150°	325.3	325.3	325.2	325.1	325.0	325.1	325.4	325.7	326.0	326.2	326.2
152.5°	333.1	333.2	333.3	333.4	333.5	333.6	333.7	333.8	333.9	334.0	334.2
155°	345.1	345.1	345.1	345.1	345.1	345.1	345.2	345.3	345.3	345.4	345.7
157.5°	355.8	355.7	355.5	355.3	355.2	355.2	355.2	355.3	355.3	355.4	355.7
160°	362.1	362.0	361.7	361.5	361.4	361.3	361.4	361.4	361.4	361.5	361.8
162.5°	367.7	367.6	367.5	367.3	367.1	367.0	367.0	367.1	367.1	367.1	367.5
165°	375.2	375.1	375.0	374.8	374.7	374.6	374.7	374.8	374.9	374.9	375.2
167.5°	381.5	381.3	381.0	380.7	380.5	380.3	380.3	380.3	380.3	380.3	380.7
170°	385.0	384.7	384.4	384.2	383.8	383.7	383.7	383.7	383.7	383.7	384.2
172.5°	387.4	387.1	386.8	386.6	386.3	386.2	386.2	386.2	386.2	386.2	386.6
175°	390.1	389.9	389.6	389.3	389.1	388.9	388.9	388.9	388.9	388.9	389.3
177.5°	391.5	391.3	391.1	390.9	390.6	390.5	390.5	390.5	390.4	390.3	390.6
180°	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1



TEST NUMBER: P333209-935

CATALOG NUMBER: S125DIP-S850D365U935-4F0-1E-UDD-D1

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°	97.2	101.8	106.4	109.5	110.9	112.4	113.7	115.2
90°	88.0	92.9	97.8	101.1	102.6	104.3	105.9	107.5
92.5°	91.9	96.7	101.6	104.8	106.3	107.9	109.4	110.9
95°	98.4	103.2	108.1	111.2	112.8	114.3	115.9	117.4
97.5°	107.4	111.9	116.6	119.6	121.1	122.5	123.9	125.4
100°	113.4	118.1	123.0	126.0	127.3	128.6	129.9	131.3
102.5°	120.0	124.7	129.4	132.4	133.8	135.2	136.6	137.9
105°	130.7	135.1	139.4	142.4	144.0	145.6	147.2	148.8
107.5°	143.4	147.7	151.8	154.5	155.7	156.9	158.1	159.3
110°	152.2	156.2	160.2	162.8	164.2	165.5	166.8	168.2



TEST NUMBER: P333209-935

CATALOG NUMBER: S125DIP-S850D365U935-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	161.0	164.7	168.4	170.9	172.2	173.5	174.7	176.0
115°	174.9	178.4	181.9	184.3	185.4	186.5	187.6	188.7
117.5°	188.5	191.9	195.3	197.6	198.6	199.8	200.8	201.9
120°	197.9	201.3	204.7	206.8	207.8	208.6	209.6	210.5
122.5°	206.8	209.9	213.1	215.2	216.1	217.1	218.1	219.1
125°	220.2	223.3	226.3	228.3	229.2	230.1	231.0	232.0
127.5°	233.2	236.2	239.0	241.0	241.9	243.0	244.0	245.0
130°	242.5	245.2	247.9	249.7	250.6	251.4	252.3	253.1
132.5°	250.8	253.6	256.2	258.0	258.6	259.2	259.8	260.5
135°	263.4	266.0	268.5	270.2	271.0	271.6	272.3	273.1
137.5°	276.5	278.9	281.3	282.8	283.2	283.7	284.1	284.6
140°	284.6	286.9	289.2	290.6	291.0	291.5	292.0	292.4
142.5°	292.8	294.8	296.8	298.0	298.4	298.9	299.4	299.8
145°	305.7	306.7	307.7	308.5	309.1	309.6	310.2	310.8
147.5°	318.1	318.7	319.2	319.3	319.3	319.1	319.0	318.9
150°	326.2	326.2	326.2	326.2	326.3	326.4	326.4	326.5
152.5°	334.3	334.5	334.7	334.7	334.4	334.2	334.1	333.8
155°	345.9	346.2	346.5	346.5	346.1	345.8	345.4	345.1
157.5°	355.9	356.3	356.5	356.5	356.0	355.5	355.1	354.6
160°	362.1	362.3	362.6	362.6	362.2	361.9	361.5	361.2
162.5°	367.7	368.1	368.4	368.4	368.0	367.6	367.2	366.8
165°	375.5	375.7	376.0	375.9	375.5	375.1	374.7	374.3
167.5°	381.2	381.5	381.9	381.9	381.5	381.1	380.6	380.3
170°	384.5	385.0	385.4	385.3	384.9	384.4	383.9	383.4
172.5°	387.0	387.4	387.8	387.8	387.4	386.9	386.5	386.1
175°	389.7	390.1	390.5	390.5	390.0	389.5	389.1	388.6
177.5°	391.0	391.3	391.6	391.6	391.2	390.8	390.5	390.0
180°	391.1	391.1	391.1	391.1	391.1	391.1	391.1	391.1

(END OF REPORT)