

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: P333210-935

Luminaire Tested: **S125DIP-S850D365U935-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333210-935
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
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-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 365 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3957.7 lumens
Efficiency: N/A
Efficacy: 113.1 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

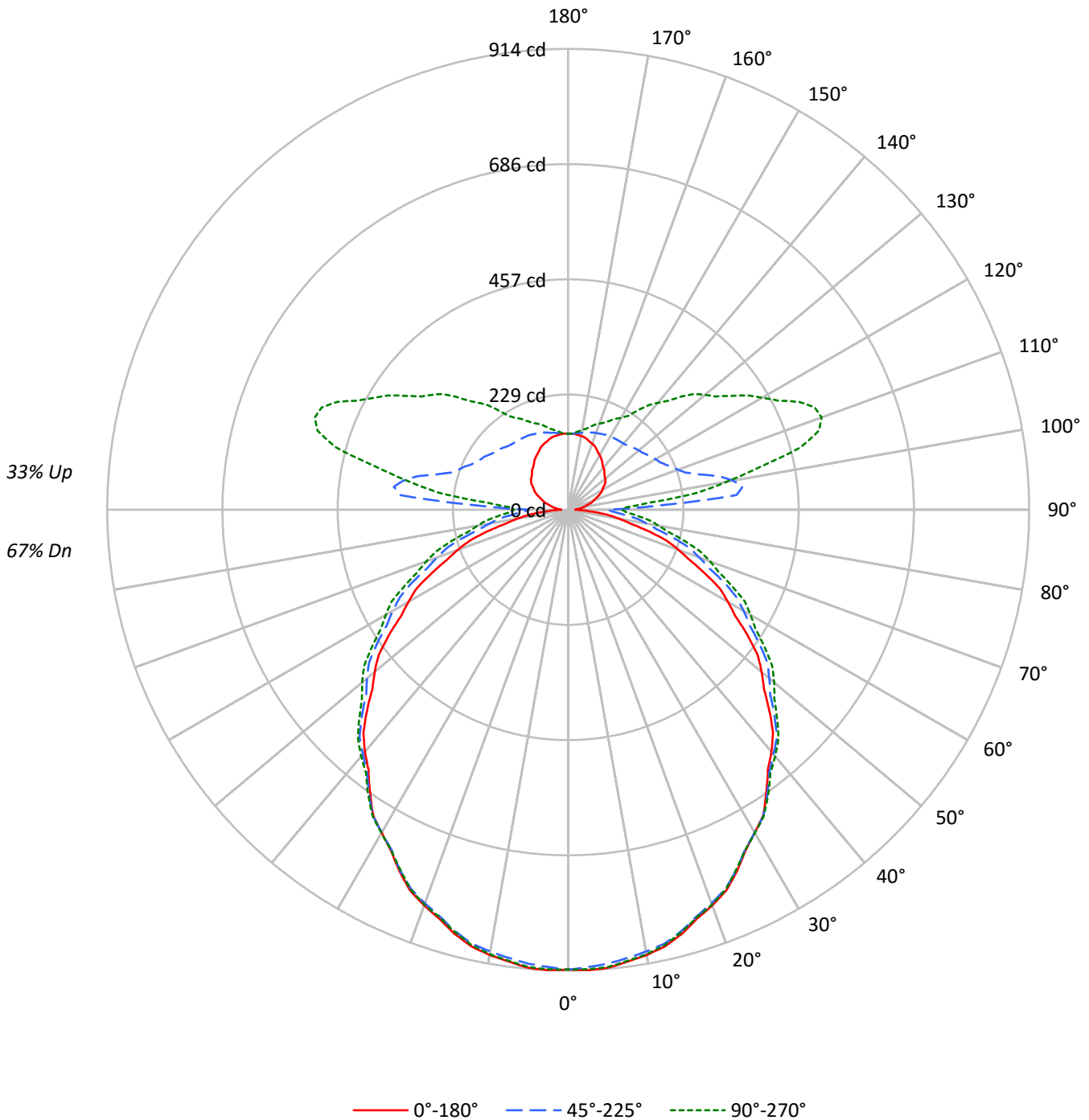
Input Watts (W): 35
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333210-935

CATALOG NUMBER: S125DIP-S850D365U935-4F0-1E-UDD-D4

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	111	111	111	111	105	105	105	105	93	93	93	82	82	82	72	72	72	67
1	101	96	91	87	95	90	86	83	80	77	74	71	68	66	62	60	59	54
2	91	83	76	71	86	78	72	67	70	65	61	61	58	55	54	51	49	45
3	83	73	65	58	78	69	62	56	61	55	51	54	50	46	47	44	41	37
4	76	64	56	49	71	61	53	47	54	48	43	48	43	39	42	38	35	32
5	70	57	49	42	65	54	46	40	48	42	37	43	38	34	38	34	30	28
6	64	51	43	37	60	49	41	35	44	37	32	39	34	29	34	30	27	24
7	59	46	38	32	56	44	36	31	40	33	28	35	30	26	31	27	24	21
8	55	42	34	28	52	40	33	27	36	30	25	32	27	23	29	24	21	19
9	51	39	31	25	48	37	29	24	33	27	23	30	25	21	27	22	19	17
10	48	35	28	23	45	34	27	22	31	25	20	28	22	19	25	20	17	15

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: P333210-935

CATALOG NUMBER: S125DIP-S850D365U935-4F0-1E-UDD-D4

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	86.2	2.2
10°-20°	244.8	6.2
20°-30°	364.1	9.2
30°-40°	431.3	10.9
40°-50°	445.9	11.3
50°-60°	410.8	10.4
60°-70°	332.0	8.4
70°-80°	222.4	5.6
80°-90°	116.2	2.9
90°-100°	174.1	4.4
100°-110°	282.9	7.1
110°-120°	252.7	6.4
120°-130°	197.0	5.0
130°-140°	151.5	3.8
140°-150°	109.9	2.8
150°-160°	76.3	1.9
160°-170°	44.9	1.1
170°-180°	14.6	0.4
0°-30°	695.2	17.6
0°-40°	1126.5	28.5
0°-60°	1983.2	50.1
0°-90°	2653.8	67.1
90°-120°	709.7	17.9
90°-150°	1168.1	29.5
90°-180°	1304.0	32.9
0°-180°	3957.7	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	100	107	10
95°	22	65	335	206	163	20
105°	42	71	270	501	476	45
115°	67	87	212	432	506	66
125°	89	104	190	338	393	79
135°	102	121	176	273	317	79
145°	117	133	169	215	240	73
155°	133	143	165	186	194	61
165°	145	149	158	168	170	41
175°	151	151	152	154	153	14
180°	151	151	151	151	151	



TEST NUMBER: P333210-935

CATALOG NUMBER: S125DIP-S850D365U935-4F0-1E-UDD-D4

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	21.3	28.2	35.2	42.2	49.3	56.4	63.8	70.9	78.2	83.1
92.5°	16.6	23.2	31.7	41.3	52.4	67.8	91.3	126.1	163.2	168.6	154.3
95°	21.7	27.1	34.7	43.2	55.1	74.7	114.1	187.8	278.5	334.8	333.5
97.5°	27.2	32.2	38.6	46.6	57.3	72.7	100.7	156.4	250.7	348.7	398.8
100°	31.2	35.9	41.3	48.8	58.8	73.2	97.2	143.1	226.1	332.0	412.2
102.5°	35.6	39.8	44.6	52.0	61.2	75.1	96.9	136.4	207.4	306.0	399.0
105°	42.4	45.6	50.3	56.6	64.6	77.7	97.0	130.1	186.8	269.8	361.1
107.5°	49.2	52.4	56.7	61.8	69.6	81.5	100.1	129.1	176.2	244.2	323.4
110°	54.1	57.0	60.6	65.8	72.7	84.6	102.6	129.2	171.6	231.3	301.4



TEST NUMBER: P333210-935

CATALOG NUMBER: S125DIP-S850D365U935-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	59.7	62.2	65.0	69.7	76.1	87.5	104.9	130.0	168.8	222.6	284.3
115°	66.8	68.8	71.1	75.3	81.2	92.1	108.6	131.4	165.7	212.0	264.5
117.5°	73.3	75.1	77.0	80.6	86.7	96.9	112.5	133.5	163.7	204.6	250.9
120°	78.1	79.6	81.5	84.8	90.6	100.7	116.0	135.1	163.2	200.3	242.9
122.5°	82.5	83.4	84.7	87.7	93.7	103.6	118.6	137.0	162.1	196.1	235.5
125°	88.8	89.2	90.5	93.1	98.7	108.4	122.4	139.5	161.1	190.4	225.2
127.5°	92.9	93.7	95.4	98.7	104.6	114.1	127.0	142.3	160.9	185.5	215.3
130°	96.1	96.8	99.0	102.8	109.0	118.2	130.4	144.7	161.3	182.9	209.4
132.5°	97.8	98.9	101.9	106.2	112.8	121.7	133.4	146.4	161.2	180.0	203.6
135°	101.6	102.6	106.1	110.7	116.9	125.7	136.6	148.0	160.7	175.7	195.6
137.5°	106.4	107.2	110.4	115.1	121.2	129.9	139.2	149.5	160.9	172.9	189.1
140°	108.6	109.5	113.1	118.0	123.8	132.2	141.2	150.5	160.4	171.0	185.4
142.5°	112.0	112.5	115.8	120.5	125.9	133.5	141.9	150.6	159.9	169.8	182.4
145°	117.1	117.5	120.4	124.4	129.8	136.6	144.6	152.1	160.3	169.2	179.3
147.5°	121.6	121.9	124.6	128.5	133.3	139.4	146.4	153.3	160.7	168.4	176.8
150°	124.8	125.4	127.5	131.5	135.7	140.9	147.6	153.9	160.7	167.6	175.0
152.5°	128.2	128.5	130.4	133.9	137.9	142.6	148.8	154.5	160.4	166.7	173.2
155°	132.7	132.7	134.5	137.5	140.6	144.8	150.0	154.9	159.7	165.0	170.4
157.5°	136.7	136.6	138.1	140.7	143.4	146.6	151.0	155.2	158.9	163.1	167.7
160°	139.4	139.1	140.3	142.4	144.8	147.6	151.5	155.2	158.3	161.9	165.6
162.5°	141.5	141.3	142.5	144.4	146.3	148.5	152.1	155.0	157.5	160.4	163.6
165°	144.8	144.2	145.2	146.6	147.9	149.7	152.1	154.5	156.4	158.3	160.7
167.5°	147.1	146.7	147.3	148.1	149.0	150.2	152.1	153.9	154.7	156.1	157.8
170°	148.5	148.2	148.5	149.1	149.7	150.6	152.1	153.3	153.9	154.9	156.1
172.5°	149.5	149.0	149.2	149.8	150.2	150.6	151.9	152.9	153.0	153.4	154.4
175°	150.6	150.0	150.3	150.6	150.6	150.6	151.5	152.1	151.9	151.9	152.1
177.5°	151.2	150.7	150.7	150.9	150.7	150.7	151.2	151.4	150.9	150.9	151.2
180°	150.9	150.9	150.9	150.9	150.9	150.9	150.9	150.9	150.9	150.9	150.9



TEST NUMBER: P333210-935

CATALOG NUMBER: S125DIP-S850D365U935-4F0-1E-UDD-D4

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°	97.1	101.8	106.4	109.5	110.9	112.3	113.7	115.1
90°	87.9	92.8	97.7	101.3	102.6	104.1	105.7	107.1
92.5°	133.2	122.9	117.5	116.0	113.5	114.1	115.1	116.0
95°	292.8	250.9	217.8	195.2	175.0	167.2	166.2	162.7
97.5°	395.0	366.7	334.4	301.7	284.2	268.5	261.1	258.5
100°	439.9	429.1	401.9	373.0	353.2	332.4	322.4	318.7
102.5°	453.0	466.1	455.1	436.4	415.1	400.7	389.7	387.2
105°	438.1	483.8	501.1	500.5	492.1	483.5	478.8	476.5
107.5°	399.4	459.0	497.3	515.7	521.9	523.1	522.3	521.1
110°	370.9	432.5	479.1	507.6	522.7	529.9	533.4	534.8



TEST NUMBER: P333210-935

CATALOG NUMBER: S125DIP-S850D365U935-4F0-1E-UDD-D4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	347.8	406.3	453.3	486.3	507.7	519.0	525.7	529.3
115°	318.3	369.0	414.3	449.9	474.8	490.6	500.3	505.5
117.5°	297.5	341.5	380.7	413.5	438.7	455.1	464.9	468.6
120°	285.9	325.7	362.6	391.6	415.3	431.1	440.6	444.2
122.5°	276.0	313.1	346.1	373.4	394.7	409.3	418.7	422.1
125°	262.2	296.4	326.0	350.0	368.1	381.5	389.2	393.2
127.5°	247.8	279.7	307.4	329.9	346.6	358.7	366.2	368.7
130°	239.3	268.8	295.3	317.0	333.2	344.2	351.3	354.1
132.5°	230.3	258.2	282.5	303.3	319.4	330.3	336.7	339.6
135°	217.7	241.3	263.4	282.5	296.9	307.9	314.4	317.2
137.5°	207.3	226.6	245.2	261.5	274.2	284.2	290.1	292.8
140°	201.2	217.7	233.8	248.1	260.2	268.9	274.2	276.6
142.5°	196.0	210.0	223.9	236.3	246.6	254.1	259.2	261.3
145°	189.8	200.2	210.6	219.7	227.8	233.8	237.9	239.9
147.5°	184.5	192.4	200.0	206.6	212.8	217.2	219.6	220.4
150°	181.7	188.4	194.2	199.8	204.5	208.4	209.7	210.3
152.5°	179.3	185.2	190.5	194.8	198.6	201.6	202.9	203.2
155°	175.6	180.5	184.7	188.0	191.1	193.2	194.2	194.4
157.5°	171.9	175.9	179.3	181.8	184.3	186.0	186.8	186.8
160°	169.5	172.5	175.6	177.7	179.9	181.3	181.9	181.7
162.5°	166.8	169.6	172.2	174.1	175.7	176.9	177.1	177.0
165°	163.1	165.2	167.0	168.6	169.8	170.4	170.4	170.4
167.5°	159.5	161.0	162.4	163.5	164.1	164.6	164.4	164.3
170°	157.6	158.5	159.5	160.1	160.7	161.0	161.0	160.7
172.5°	155.4	156.4	157.0	157.4	157.5	158.1	157.6	157.2
175°	153.1	153.1	153.7	153.7	153.7	153.9	153.3	153.1
177.5°	151.4	151.6	151.6	151.6	151.4	151.6	150.9	150.9
180°	150.9	150.9	150.9	150.9	150.9	150.9	150.9	150.9

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