

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: P333208-935

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333208-935  
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-S850D365U935-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 365 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4086.6 lumens  
Efficiency: N/A  
Efficacy: 116.8 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

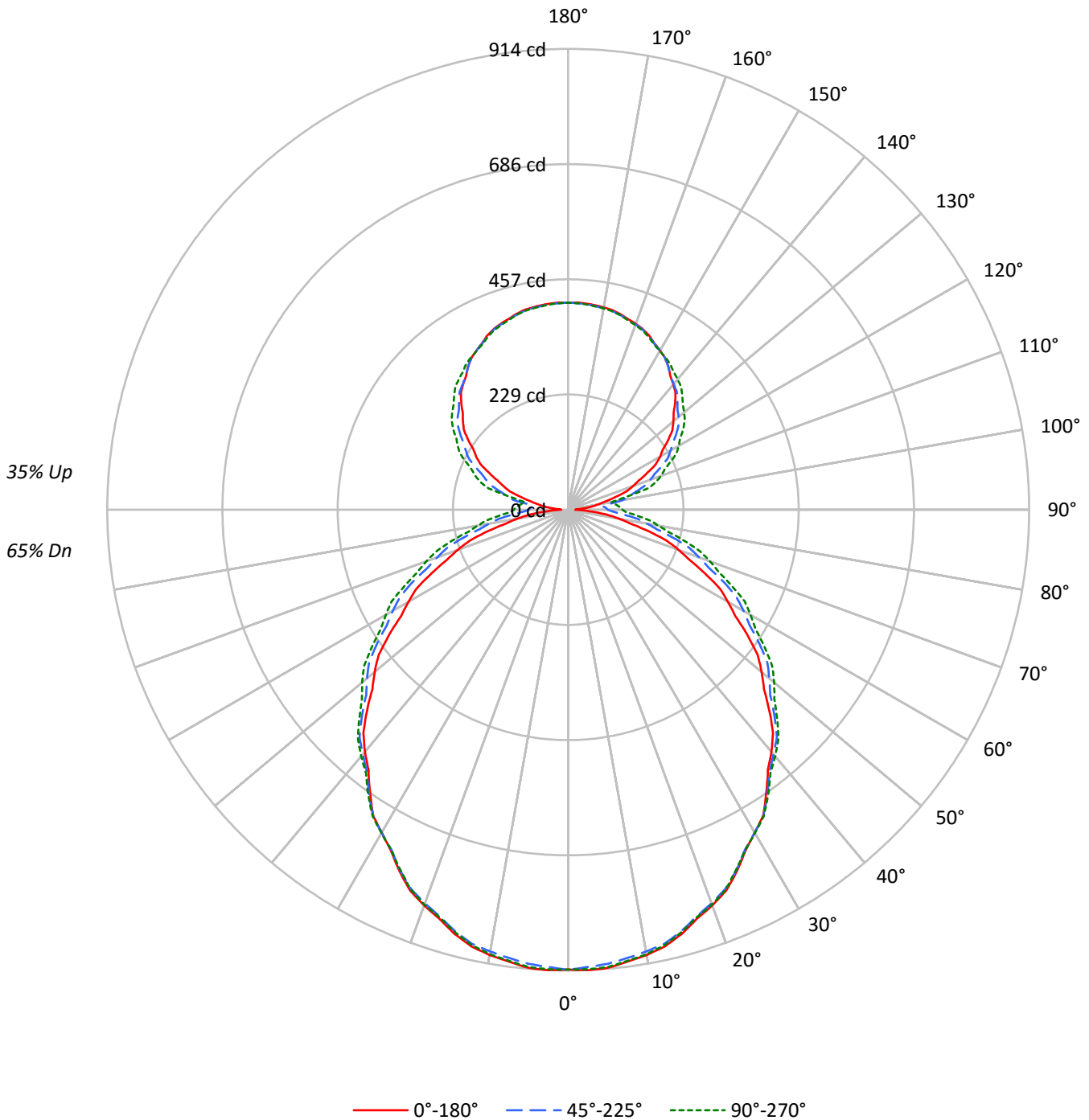
Input Watts (W): 35  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





TEST NUMBER: P333208-935

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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	104	104	104	104	92	92	92	80	80	80	70	70	70	65
1	100	95	91	87	94	90	86	82	79	76	73	69	67	65	60	59	57	53
2	91	83	76	70	85	78	72	67	69	64	60	60	57	54	52	50	47	43
3	83	72	65	58	77	68	61	55	60	55	50	53	49	45	46	43	40	36
4	76	64	56	49	71	60	53	47	53	47	42	47	42	38	41	37	34	31
5	69	57	48	42	65	54	46	40	48	41	37	42	37	33	37	33	30	27
6	64	51	43	36	60	48	41	35	43	37	32	38	33	29	33	29	26	23
7	59	46	38	32	55	44	36	31	39	33	28	35	29	26	31	26	23	21
8	55	42	34	28	51	40	32	27	36	29	25	32	27	23	28	24	21	18
9	51	38	31	25	48	36	29	24	33	27	22	29	24	20	26	22	19	16
10	48	35	28	23	45	33	27	22	30	24	20	27	22	19	24	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



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	86.2	2.1
10°-20°	244.8	6.0
20°-30°	364.1	8.9
30°-40°	431.3	10.6
40°-50°	445.9	10.9
50°-60°	410.8	10.1
60°-70°	332.0	8.1
70°-80°	222.4	5.4
80°-90°	116.2	2.8
90°-100°	79.6	1.9
100°-110°	139.7	3.4
110°-120°	198.7	4.9
120°-130°	232.2	5.7
130°-140°	238.1	5.8
140°-150°	217.7	5.3
150°-160°	174.8	4.3
160°-170°	113.0	2.8
170°-180°	39.0	1.0
0°-30°	695.2	17.0
0°-40°	1126.5	27.6
0°-60°	1983.2	48.5
0°-90°	2653.8	64.9
90°-120°	418.0	10.2
90°-150°	1106.0	27.1
90°-180°	1433.0	35.1
0°-180°	4086.6	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	10
95°	29	51	70	90	98	31
105°	98	114	140	157	164	103
115°	173	182	205	219	223	172
125°	242	245	262	274	278	216
135°	300	301	306	317	320	231
145°	346	346	346	351	353	216
155°	380	379	379	380	378	175
165°	401	400	400	402	399	113
175°	410	409	409	411	409	39
180°	410	410	410	410	410	



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CATALOG NUMBER: S125DIP-S850D365U935-4F0-1E-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	34.4	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°	17.6	23.1	28.6	34.1	39.6	46.0	53.3	60.7	68.0	75.3	80.1
95°	28.9	33.9	38.9	43.8	48.8	53.4	57.6	61.7	66.0	70.2	74.8
97.5°	46.8	51.7	56.8	61.8	66.8	70.1	71.5	72.9	74.4	75.8	78.0
100°	60.7	65.0	69.4	73.8	78.2	83.7	90.3	96.9	103.6	110.2	104.3
102.5°	74.8	79.0	83.0	87.1	91.3	96.5	102.8	109.2	115.5	121.9	124.1
105°	97.6	101.0	104.4	107.9	111.3	116.1	122.0	127.9	133.9	139.9	143.9
107.5°	121.1	123.9	126.6	129.2	132.0	136.3	142.2	148.0	153.9	159.7	163.7
110°	136.6	138.9	141.3	143.7	146.0	150.1	155.8	161.5	167.2	172.9	176.5



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	151.6	153.7	155.8	157.8	159.9	163.7	169.2	174.6	180.1	185.6	189.0
115°	173.4	175.1	176.8	178.6	180.3	183.7	189.0	194.2	199.5	204.7	208.0
117.5°	195.9	196.8	197.7	198.6	199.5	202.5	207.7	212.8	218.0	223.1	226.1
120°	210.5	211.0	211.5	212.1	212.7	215.2	220.1	224.8	229.6	234.4	237.6
122.5°	222.7	223.3	223.8	224.3	224.8	227.4	231.9	236.3	240.9	245.4	248.5
125°	242.5	242.8	243.1	243.3	243.6	245.7	249.7	253.7	257.6	261.6	264.5
127.5°	260.6	260.8	261.0	261.1	261.2	262.9	266.1	269.3	272.5	275.8	278.5
130°	272.3	272.5	272.6	272.8	272.9	274.4	277.2	280.1	282.9	285.8	288.3
132.5°	283.3	283.7	284.0	284.4	284.7	285.9	287.9	289.9	291.9	293.9	296.6
135°	299.7	300.0	300.1	300.4	300.6	301.3	302.6	303.8	305.1	306.3	308.8
137.5°	314.9	315.0	315.2	315.4	315.6	316.0	316.5	317.1	317.6	318.2	320.6
140°	324.1	324.3	324.4	324.5	324.7	324.8	324.9	325.0	325.2	325.3	327.6
142.5°	333.1	333.0	332.9	332.9	332.8	332.9	332.9	333.1	333.2	333.4	335.3
145°	346.3	346.3	346.2	346.1	346.0	346.0	346.0	346.0	346.0	346.0	347.1
147.5°	357.0	357.0	357.0	356.9	356.9	356.9	357.0	357.1	357.1	357.2	357.7
150°	364.3	364.2	364.0	363.9	363.8	363.8	363.9	364.0	364.2	364.3	364.5
152.5°	371.3	371.1	370.7	370.5	370.1	370.1	370.2	370.4	370.5	370.7	370.7
155°	380.5	380.0	379.6	379.2	378.8	378.7	378.8	378.9	379.1	379.2	379.4
157.5°	387.4	387.2	386.9	386.7	386.5	386.3	386.3	386.4	386.4	386.4	386.6
160°	392.3	391.9	391.5	391.1	390.7	390.5	390.5	390.6	390.7	390.8	391.1
162.5°	396.2	395.8	395.4	394.9	394.6	394.4	394.5	394.5	394.6	394.7	395.0
165°	401.4	401.1	400.6	400.2	399.8	399.7	399.7	399.8	399.8	399.9	400.3
167.5°	405.4	404.9	404.5	404.1	403.6	403.5	403.6	403.6	403.7	403.7	404.2
170°	407.5	407.1	406.6	406.1	405.6	405.4	405.5	405.5	405.6	405.7	406.2
172.5°	409.0	408.5	408.0	407.6	407.1	406.9	407.0	407.2	407.3	407.4	407.9
175°	410.5	410.2	409.7	409.3	409.0	408.8	408.8	408.9	409.0	409.1	409.6
177.5°	411.3	411.0	410.6	410.4	410.0	409.8	409.9	410.0	410.0	410.1	410.4
180°	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5



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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°	97.2	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°	84.8	89.5	94.4	97.5	98.9	100.4	101.9	103.4
95°	79.6	84.3	89.0	92.0	93.4	94.8	96.2	97.6
97.5°	80.3	82.6	84.8	86.6	88.0	89.4	90.7	92.0
100°	98.4	92.5	86.5	84.0	85.0	85.9	86.9	87.7
102.5°	126.1	128.3	130.4	129.7	126.3	122.9	119.5	116.1
105°	147.8	151.8	155.8	158.4	159.7	161.1	162.4	163.7
107.5°	167.6	171.5	175.5	178.0	179.0	180.0	181.1	182.1
110°	180.0	183.7	187.2	189.7	191.1	192.6	194.1	195.5





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

**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	192.3	195.7	199.1	201.4	202.7	204.0	205.3	206.6
115°	211.3	214.6	217.9	220.0	220.8	221.5	222.3	223.1
117.5°	229.2	232.2	235.2	237.3	238.5	239.7	240.8	242.0
120°	240.8	244.1	247.4	249.4	250.2	251.1	251.9	252.8
122.5°	251.6	254.7	257.7	259.7	260.5	261.2	262.1	262.9
125°	267.4	270.4	273.3	275.1	275.9	276.6	277.5	278.3
127.5°	281.4	284.1	286.9	288.6	289.3	290.0	290.6	291.3
130°	290.9	293.5	296.1	297.7	298.3	299.0	299.7	300.3
132.5°	299.4	302.1	304.9	306.4	306.9	307.5	308.0	308.4
135°	311.3	313.7	316.2	317.6	318.2	318.8	319.4	319.9
137.5°	323.0	325.3	327.7	329.1	329.5	330.0	330.5	330.9
140°	329.9	332.3	334.6	336.0	336.3	336.7	337.1	337.5
142.5°	337.2	339.1	341.0	342.1	342.5	342.9	343.3	343.6
145°	348.2	349.2	350.3	351.0	351.4	351.8	352.1	352.6
147.5°	358.0	358.4	358.9	359.0	358.9	358.7	358.6	358.4
150°	364.5	364.7	364.8	364.7	364.4	364.0	363.7	363.3
152.5°	370.9	371.0	371.2	371.0	370.6	370.1	369.7	369.2
155°	379.6	379.8	380.0	379.9	379.4	378.8	378.2	377.7
157.5°	386.8	387.0	387.3	387.1	386.6	386.0	385.5	385.0
160°	391.3	391.6	391.8	391.8	391.2	390.6	390.1	389.6
162.5°	395.5	395.8	396.2	396.1	395.5	394.9	394.3	393.7
165°	400.7	401.1	401.6	401.5	401.0	400.4	399.8	399.3
167.5°	404.8	405.2	405.7	405.6	405.0	404.4	403.8	403.2
170°	406.7	407.3	407.9	407.9	407.3	406.7	406.0	405.4
172.5°	408.4	408.9	409.3	409.3	408.7	408.0	407.4	406.8
175°	410.1	410.7	411.2	411.2	410.5	409.9	409.3	408.7
177.5°	410.9	411.2	411.6	411.6	411.1	410.7	410.3	409.8
180°	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5

(END OF REPORT)