

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: P333226-935

Luminaire Tested: **S125DIP-S850D810U935-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333226-935
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-S850D810U935-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 810 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5616.3 lumens
Efficiency: N/A
Efficacy: 122.4 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

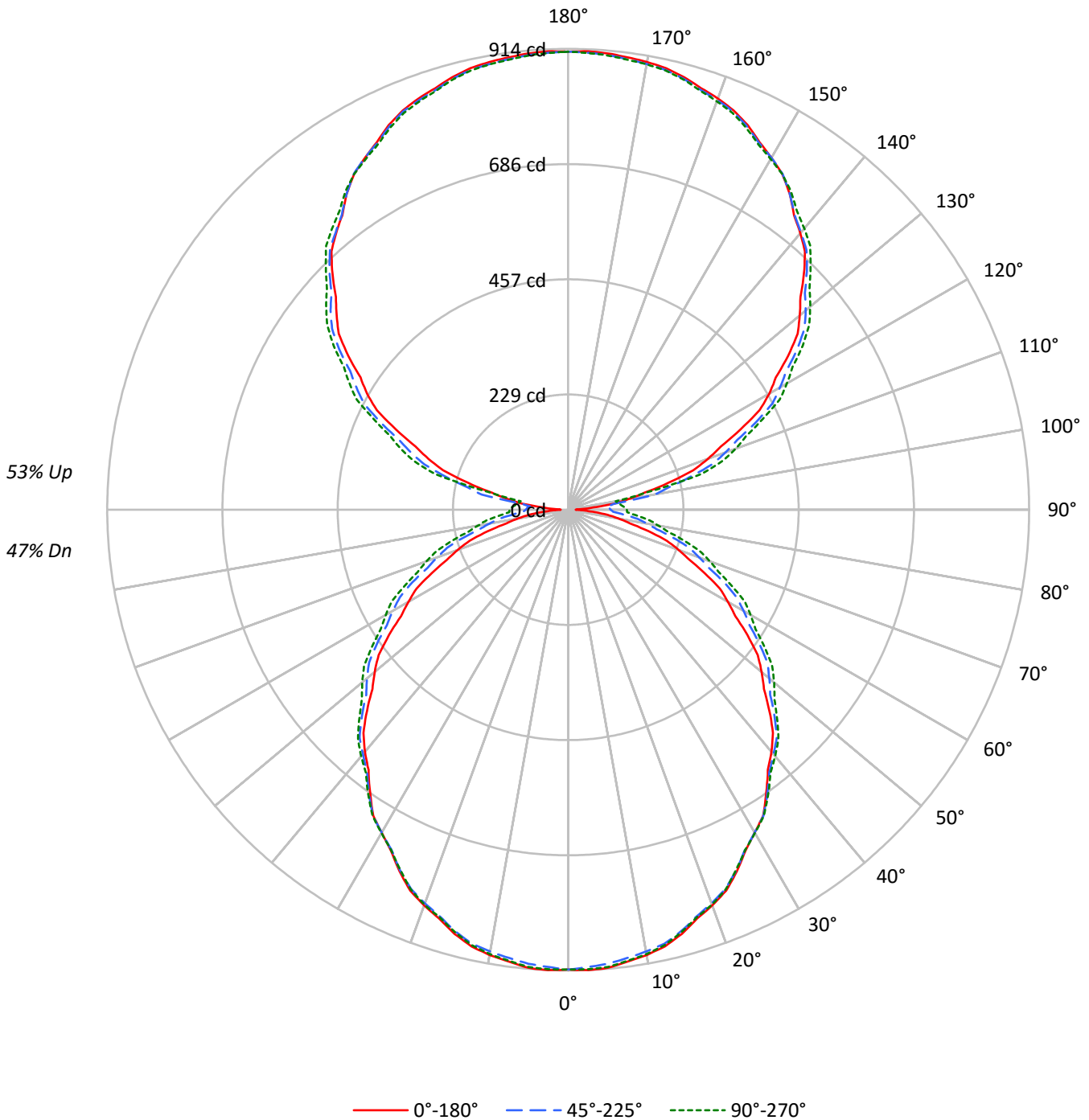
Input Watts (W): 45.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333226-935

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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	106	106	106	106	98	98	98	98	82	82	82	67	67	67	54	54	54	47
1	96	92	88	84	88	84	81	78	71	68	66	58	56	54	46	45	44	38
2	88	80	73	68	80	73	68	63	61	57	54	50	48	45	40	38	36	32
3	80	70	62	56	73	64	58	52	54	49	45	44	41	38	35	33	31	26
4	73	62	54	47	66	57	50	44	48	42	38	39	35	32	32	29	26	22
5	67	55	47	40	61	51	43	38	43	37	33	35	31	28	28	25	23	19
6	61	49	41	35	56	45	38	33	38	33	28	32	27	24	26	22	20	17
7	57	44	36	31	52	41	34	29	35	29	25	29	25	21	23	20	18	15
8	53	40	32	27	48	37	30	25	32	26	22	26	22	19	21	18	16	13
9	49	37	29	24	45	34	27	23	29	24	20	24	20	17	20	17	14	12
10	46	34	26	21	42	31	25	20	27	21	18	22	18	15	18	15	13	11

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	1.5
10°-20°	244.8	4.4
20°-30°	364.1	6.5
30°-40°	431.3	7.7
40°-50°	445.9	7.9
50°-60°	410.8	7.3
60°-70°	332.0	5.9
70°-80°	222.4	4.0
80°-90°	117.2	2.1
90°-100°	97.7	1.7
100°-110°	251.1	4.5
110°-120°	400.9	7.1
120°-130°	491.7	8.8
130°-140°	517.2	9.2
140°-150°	479.7	8.5
150°-160°	386.7	6.9
160°-170°	250.1	4.5
170°-180°	86.3	1.5
0°-30°	695.2	12.4
0°-40°	1126.5	20.1
0°-60°	1983.2	35.3
0°-90°	2654.8	47.3
90°-120°	749.8	13.4
90°-150°	2238.4	39.9
90°-180°	2961.0	52.7
0°-180°	5616.3	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	49	84	107	116	11
95°	50	70	76	98	105	58
105°	206	224	250	267	273	218
115°	377	387	411	423	425	374
125°	532	537	554	565	568	475
135°	661	664	669	679	680	509
145°	765	766	766	770	770	478
155°	842	838	839	841	836	388
165°	888	884	885	888	883	251
175°	908	905	905	910	904	86
180°	908	908	908	908	908	



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CATALOG NUMBER: S125DIP-S850D810U935-4F0-1E-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°	28.1	34.6	41.2	47.8	54.4	61.2	68.2	75.2	82.1	89.1	93.8
90°	15.0	22.6	30.1	37.6	45.2	52.9	60.7	68.4	76.3	84.1	89.5
92.5°	23.2	28.3	33.3	38.4	43.4	49.9	57.7	65.5	73.4	81.3	86.4
95°	50.0	54.8	59.4	64.1	68.9	71.8	72.8	73.9	75.0	76.0	81.2
97.5°	90.7	96.2	101.6	107.0	112.5	112.9	108.1	103.4	98.7	93.9	93.8
100°	122.3	126.9	131.6	136.1	140.8	146.5	153.5	160.5	167.5	174.4	156.3
102.5°	154.5	158.9	163.2	167.7	172.1	177.6	184.2	190.7	197.3	203.9	203.6
105°	206.0	209.8	213.5	217.3	221.1	226.0	232.0	237.9	243.8	249.9	253.8
107.5°	259.6	262.3	265.0	267.7	270.4	274.7	280.8	286.8	292.8	298.9	302.8
110°	294.5	296.9	299.2	301.6	304.0	308.2	314.0	319.9	325.7	331.6	334.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	327.9	330.1	332.3	334.7	336.9	340.9	346.5	352.0	357.6	363.2	366.2
115°	377.0	379.2	381.3	383.5	385.6	389.3	394.7	399.9	405.3	410.6	413.5
117.5°	428.0	428.9	429.8	430.7	431.5	434.7	440.1	445.7	451.1	456.5	459.2
120°	460.3	460.8	461.2	461.7	462.1	464.9	469.8	474.8	479.9	484.9	488.0
122.5°	488.2	489.0	489.8	490.7	491.5	494.3	498.9	503.5	508.2	512.7	515.7
125°	532.2	533.0	533.8	534.7	535.5	538.0	541.9	545.9	549.9	553.9	556.5
127.5°	573.4	573.9	574.5	575.1	575.6	577.5	580.7	583.8	586.9	590.1	592.7
130°	599.3	599.8	600.4	600.9	601.5	603.2	606.1	609.1	612.0	614.9	617.3
132.5°	624.4	625.3	626.0	626.9	627.8	629.0	630.9	632.7	634.5	636.3	639.0
135°	661.0	661.7	662.4	663.1	663.7	664.7	665.8	666.8	668.0	669.1	671.3
137.5°	694.7	695.3	695.9	696.5	697.1	697.6	698.0	698.4	698.8	699.2	701.6
140°	716.0	716.3	716.6	716.9	717.2	717.4	717.4	717.5	717.5	717.6	720.1
142.5°	735.9	735.9	736.0	736.0	736.0	736.2	736.4	736.7	736.8	737.1	739.1
145°	765.2	765.3	765.3	765.4	765.5	765.6	765.6	765.6	765.6	765.6	766.7
147.5°	789.8	789.8	789.7	789.6	789.6	789.6	789.8	790.0	790.2	790.4	790.8
150°	806.0	805.7	805.4	805.1	804.8	804.8	805.1	805.4	805.7	806.0	806.3
152.5°	821.7	821.0	820.3	819.7	819.0	818.8	819.1	819.4	819.7	820.0	820.3
155°	841.7	840.8	839.9	839.0	838.1	837.8	838.1	838.4	838.7	839.0	839.4
157.5°	857.1	856.6	856.1	855.6	855.0	854.7	854.8	854.8	854.8	854.9	855.3
160°	868.0	867.0	866.2	865.2	864.4	864.0	864.1	864.3	864.4	864.5	865.1
162.5°	876.6	875.6	874.8	873.8	873.0	872.6	872.7	872.9	873.1	873.2	874.0
165°	888.1	887.3	886.3	885.5	884.5	884.2	884.3	884.5	884.6	884.8	885.7
167.5°	896.7	895.9	894.9	894.0	893.0	892.7	892.8	892.9	893.1	893.3	894.3
170°	901.6	900.5	899.5	898.5	897.4	897.0	897.1	897.2	897.4	897.6	898.8
172.5°	904.8	903.8	902.8	901.7	900.6	900.3	900.5	900.8	901.0	901.3	902.4
175°	908.4	907.4	906.5	905.7	904.7	904.4	904.5	904.7	904.8	905.0	906.2
177.5°	910.0	909.2	908.5	907.8	907.1	906.8	906.9	907.0	907.1	907.2	908.1
180°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4



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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°	98.5	103.2	108.0	111.1	112.5	114.0	115.5	117.0
90°	94.7	100.0	105.4	108.9	110.8	112.6	114.5	116.3
92.5°	91.5	96.7	101.9	105.2	106.9	108.5	110.0	111.7
95°	86.3	91.4	96.5	99.8	101.2	102.5	103.9	105.4
97.5°	93.8	93.8	93.8	94.4	95.7	97.1	98.4	99.8
100°	138.1	120.0	101.9	93.2	93.8	94.4	94.9	95.5
102.5°	203.5	203.2	203.0	198.5	189.4	180.5	171.5	162.5
105°	257.8	261.7	265.7	268.4	269.6	270.8	272.1	273.3
107.5°	306.8	310.7	314.7	317.1	317.9	318.7	319.4	320.2
110°	338.2	341.6	344.8	347.3	348.9	350.4	351.9	353.4



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CATALOG NUMBER: S125DIP-S850D810U935-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	369.3	372.3	375.4	377.5	378.7	379.9	381.0	382.2
115°	416.6	419.6	422.5	424.1	424.5	424.7	425.0	425.3
117.5°	461.8	464.3	466.9	468.7	469.7	470.6	471.6	472.6
120°	491.1	494.1	497.2	499.0	499.5	499.9	500.3	500.8
122.5°	518.6	521.5	524.4	526.1	526.4	526.7	527.0	527.4
125°	559.0	561.6	564.2	565.8	566.3	566.8	567.4	567.9
127.5°	595.4	598.0	600.5	601.9	601.9	602.0	602.0	602.1
130°	619.6	621.9	624.2	625.5	625.8	626.0	626.3	626.5
132.5°	641.7	644.4	647.0	648.5	648.6	648.7	648.8	648.8
135°	673.6	675.9	678.2	679.4	679.5	679.6	679.7	679.8
137.5°	704.0	706.5	708.9	710.1	710.1	710.1	710.1	710.2
140°	722.6	725.0	727.5	728.7	728.6	728.5	728.4	728.2
142.5°	741.0	742.9	744.9	745.7	745.6	745.5	745.5	745.4
145°	767.8	769.0	770.2	770.7	770.6	770.5	770.3	770.3
147.5°	791.3	791.9	792.4	792.2	791.5	790.8	790.1	789.4
150°	806.6	806.9	807.2	806.8	805.8	804.9	803.8	802.9
152.5°	820.6	820.9	821.2	820.8	819.8	818.7	817.7	816.7
155°	839.9	840.3	840.8	840.4	839.2	838.0	836.8	835.6
157.5°	855.8	856.4	856.8	856.4	855.2	854.0	852.8	851.6
160°	865.7	866.3	866.9	866.7	865.5	864.3	863.1	861.9
162.5°	874.9	875.7	876.5	876.3	874.9	873.7	872.4	871.1
165°	886.6	887.4	888.4	888.2	887.0	885.8	884.6	883.4
167.5°	895.4	896.5	897.6	897.4	896.0	894.8	893.4	892.1
170°	899.9	901.1	902.3	902.2	901.0	899.6	898.2	896.9
172.5°	903.4	904.6	905.7	905.5	904.1	902.8	901.5	900.1
175°	907.3	908.5	909.7	909.6	908.4	907.0	905.7	904.3
177.5°	909.0	909.7	910.6	910.6	909.6	908.6	907.7	906.7
180°	908.4	908.4	908.4	908.4	908.4	908.4	908.4	908.4

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