

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: P333236-935

Luminaire Tested: **S125DIP-S850D1035U935-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333236-935
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-S850D1035U935-4F0-1E-UDD-D1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5909.6 lumens
Efficiency: N/A
Efficacy: 113.6 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

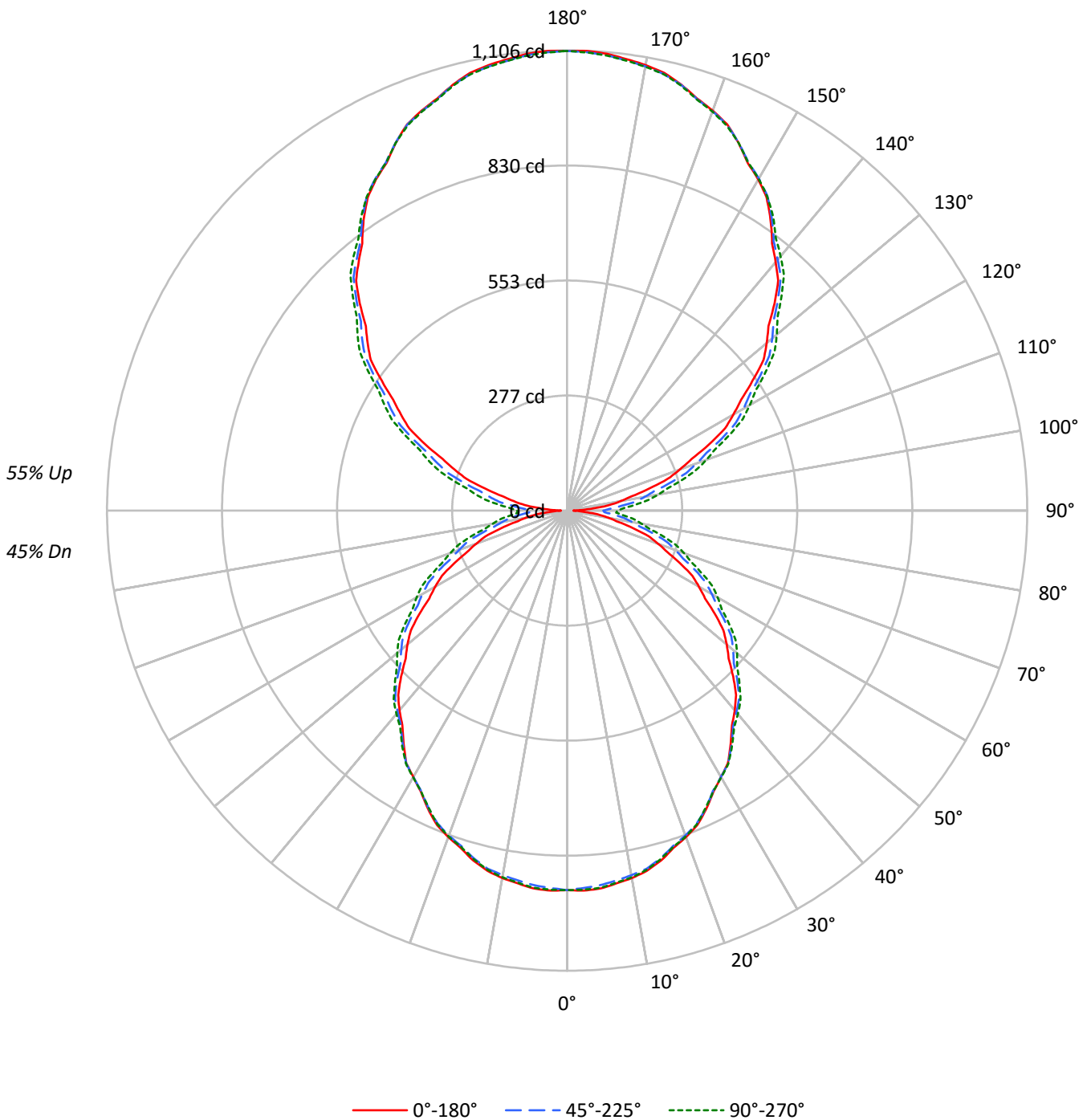
Input Watts (W): 52
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	97	97	97	97	81	81	81	65	65	65	51	51	51	45
1	96	91	87	84	88	84	80	77	70	67	65	56	55	53	44	43	42	36
2	87	79	73	68	79	73	67	63	61	56	53	49	46	44	39	37	35	30
3	79	70	62	56	72	64	57	52	53	48	44	43	40	37	34	32	29	25
4	72	61	53	47	66	56	49	44	47	42	37	38	34	31	30	28	25	21
5	66	55	46	40	60	50	43	38	42	36	32	34	30	27	27	24	22	18
6	61	49	41	35	56	45	38	32	38	32	28	31	27	23	25	22	19	16
7	56	44	36	30	51	41	33	28	34	29	25	28	24	21	22	19	17	14
8	52	40	32	27	48	37	30	25	31	26	22	26	21	18	21	17	15	13
9	49	36	29	24	44	34	27	22	28	23	19	24	19	16	19	16	14	11
10	45	33	26	21	42	31	24	20	26	21	17	22	18	15	18	15	12	10

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	4.1
20°-30°	364.1	6.2
30°-40°	431.3	7.3
40°-50°	445.9	7.5
50°-60°	410.8	7.0
60°-70°	332.0	5.6
70°-80°	222.4	3.8
80°-90°	117.7	2.0
90°-100°	138.7	2.3
100°-110°	266.2	4.5
110°-120°	402.0	6.8
120°-130°	505.1	8.5
130°-140°	553.6	9.4
140°-150°	536.4	9.1
150°-160°	449.2	7.6
160°-170°	298.6	5.1
170°-180°	104.5	1.8
0°-30°	695.2	11.8
0°-40°	1126.5	19.1
0°-60°	1983.2	33.6
0°-90°	2655.3	44.9
90°-120°	806.9	13.7
90°-150°	2402.0	40.6
90°-180°	3254.0	55.1
0°-180°	5909.6	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	51	87	111	121	13
95°	68	93	132	156	165	69
105°	204	223	255	277	286	218
115°	376	386	410	425	430	372
125°	544	549	567	579	584	487
135°	705	709	716	727	729	543
145°	853	855	858	862	863	533
155°	975	975	976	979	975	449
165°	1060	1058	1059	1062	1057	299
175°	1102	1099	1098	1103	1098	105
180°	1105	1105	1105	1105	1105	



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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	34.7	41.4	48.0	54.8	61.6	68.6	75.6	82.7	89.6	94.5
90°	15.2	23.1	30.9	38.8	46.8	54.7	62.8	70.9	79.0	87.0	92.6
92.5°	33.7	40.6	47.6	54.5	61.5	69.2	77.8	86.4	94.9	103.5	109.2
95°	67.5	73.0	78.6	84.1	89.7	96.8	105.5	114.2	122.8	131.5	137.2
97.5°	103.4	108.2	113.0	117.8	122.6	129.6	138.7	147.9	157.0	166.2	171.6
100°	130.2	134.3	138.5	142.7	146.9	153.3	162.2	171.1	179.9	188.7	194.7
102.5°	159.0	163.7	168.2	172.9	177.5	183.6	191.0	198.5	206.0	213.4	219.3
105°	204.1	208.2	212.3	216.5	220.6	226.2	233.3	240.4	247.5	254.6	259.8
107.5°	253.8	257.5	261.1	264.8	268.5	273.6	280.2	286.8	293.4	300.0	304.5
110°	288.2	291.5	294.9	298.3	301.5	306.3	312.5	318.6	324.7	330.9	335.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	324.0	326.4	328.7	331.1	333.6	337.9	344.0	350.1	356.2	362.4	366.3
115°	375.8	378.0	380.1	382.3	384.4	388.3	393.9	399.4	404.9	410.5	413.9
117.5°	427.9	429.1	430.4	431.7	432.9	436.2	441.4	446.6	451.9	457.1	460.6
120°	460.9	462.4	464.0	465.5	467.1	470.3	475.0	479.8	484.6	489.3	492.7
122.5°	495.9	496.5	497.2	497.8	498.4	501.2	506.1	511.0	515.9	520.8	523.9
125°	544.2	545.2	546.1	547.1	548.0	550.6	554.7	559.0	563.1	567.2	570.1
127.5°	595.0	595.4	595.8	596.3	596.8	598.7	602.2	605.7	609.2	612.7	615.4
130°	625.9	626.6	627.4	628.2	628.9	630.9	634.0	637.2	640.3	643.5	646.1
132.5°	656.1	657.6	659.2	660.6	662.2	664.0	666.1	668.1	670.2	672.3	674.9
135°	704.9	705.8	706.8	707.7	708.7	710.0	711.5	713.2	714.7	716.3	718.8
137.5°	750.8	751.7	752.7	753.6	754.6	755.6	756.7	757.9	758.9	760.0	762.6
140°	779.6	780.7	781.6	782.6	783.5	784.4	785.1	785.9	786.7	787.5	790.1
142.5°	809.3	809.9	810.5	811.1	811.8	812.5	813.3	814.1	814.9	815.6	817.7
145°	852.7	853.3	853.9	854.5	855.0	855.6	856.2	856.7	857.3	857.9	858.8
147.5°	892.1	892.5	892.9	893.4	893.7	894.2	894.7	895.1	895.5	896.0	896.8
150°	918.9	918.7	918.5	918.3	918.2	918.4	919.2	920.0	920.7	921.4	921.4
152.5°	940.9	941.2	941.4	941.7	941.9	942.3	942.5	942.9	943.1	943.5	943.9
155°	974.7	974.7	974.7	974.7	974.7	974.8	975.1	975.3	975.4	975.6	976.4
157.5°	1005.0	1004.6	1004.2	1003.8	1003.3	1003.2	1003.4	1003.6	1003.8	1004.0	1004.8
160°	1022.9	1022.4	1021.7	1021.1	1020.6	1020.5	1020.6	1020.8	1021.0	1021.1	1021.9
162.5°	1038.7	1038.3	1037.8	1037.4	1037.1	1036.8	1036.9	1036.9	1037.0	1037.0	1037.9
165°	1059.9	1059.5	1059.1	1058.7	1058.3	1058.3	1058.4	1058.6	1058.8	1059.0	1059.8
167.5°	1077.7	1076.9	1076.2	1075.5	1074.7	1074.3	1074.3	1074.3	1074.3	1074.3	1075.5
170°	1087.4	1086.6	1085.8	1085.1	1084.3	1083.9	1083.9	1083.9	1083.9	1083.9	1085.1
172.5°	1094.2	1093.5	1092.7	1091.9	1091.2	1090.8	1090.8	1090.8	1090.8	1090.8	1091.9
175°	1102.0	1101.2	1100.4	1099.7	1098.9	1098.5	1098.5	1098.5	1098.5	1098.5	1099.7
177.5°	1106.0	1105.4	1104.7	1104.1	1103.5	1103.1	1102.9	1102.8	1102.7	1102.5	1103.5
180°	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6



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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°	99.2	103.9	108.7	111.8	113.4	114.9	116.3	117.9
90°	98.2	103.7	109.2	113.0	114.9	116.8	118.8	120.8
92.5°	114.9	120.5	126.1	129.9	131.7	133.5	135.3	137.2
95°	142.8	148.6	154.3	158.1	159.8	161.6	163.3	165.1
97.5°	177.0	182.5	188.0	191.4	193.0	194.6	196.1	197.8
100°	200.5	206.4	212.3	216.0	217.7	219.2	220.8	222.3
102.5°	225.2	231.0	236.9	240.7	242.5	244.2	245.9	247.6
105°	264.8	270.0	275.1	278.6	280.6	282.6	284.6	286.5
107.5°	309.0	313.6	318.1	320.9	322.1	323.3	324.5	325.6
110°	339.6	343.9	348.3	351.0	352.2	353.4	354.6	355.9



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CATALOG NUMBER: S125DIP-S850D1035U935-4F0-1E-UDD-D1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	370.1	374.0	377.9	380.4	381.4	382.5	383.5	384.5
115°	417.2	420.7	424.0	426.3	427.2	428.3	429.2	430.2
117.5°	464.2	467.7	471.2	473.3	473.9	474.5	475.0	475.6
120°	496.1	499.5	502.8	504.7	505.1	505.6	506.0	506.4
122.5°	526.9	530.0	533.1	534.9	535.5	536.1	536.7	537.3
125°	572.8	575.7	578.4	580.2	581.1	581.9	582.6	583.5
127.5°	618.2	620.9	623.6	625.4	626.2	627.0	627.8	628.5
130°	648.7	651.3	653.8	655.5	656.1	656.7	657.3	657.9
132.5°	677.4	680.1	682.7	684.1	684.4	684.7	685.0	685.3
135°	721.4	724.0	726.6	728.1	728.2	728.5	728.8	728.9
137.5°	765.2	767.8	770.3	771.5	771.4	771.2	771.0	770.9
140°	792.6	795.1	797.7	798.9	798.7	798.6	798.4	798.3
142.5°	819.8	821.9	824.0	824.9	824.8	824.6	824.5	824.3
145°	859.9	860.8	861.9	862.5	862.6	862.9	863.1	863.3
147.5°	897.6	898.4	899.1	899.1	898.1	897.2	896.2	895.3
150°	921.4	921.4	921.4	921.4	921.2	921.0	920.8	920.7
152.5°	944.4	944.9	945.3	945.2	944.6	943.9	943.3	942.6
155°	977.1	977.9	978.7	978.6	977.7	976.6	975.7	974.7
157.5°	1005.5	1006.3	1007.0	1006.8	1005.6	1004.3	1003.0	1001.8
160°	1022.7	1023.5	1024.2	1024.2	1023.2	1022.3	1021.3	1020.3
162.5°	1038.8	1039.7	1040.7	1040.6	1039.5	1038.4	1037.2	1036.1
165°	1060.5	1061.3	1062.0	1061.9	1060.8	1059.5	1058.4	1057.3
167.5°	1076.6	1077.7	1078.9	1078.8	1077.7	1076.5	1075.3	1074.1
170°	1086.2	1087.4	1088.5	1088.4	1087.1	1085.7	1084.4	1083.1
172.5°	1093.1	1094.2	1095.4	1095.4	1094.2	1093.0	1091.8	1090.6
175°	1100.9	1102.0	1103.1	1103.0	1101.7	1100.4	1099.0	1097.7
177.5°	1104.3	1105.3	1106.1	1106.1	1105.0	1104.0	1102.9	1101.8
180°	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6	1104.6

(END OF REPORT)