

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: P333226-830

Luminaire Tested: **S125DIP-S850D810U830-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333226-830
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-S850D810U830-4F0-1E-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: 6148.2 lumens
Efficiency: N/A
Efficacy: 133.9 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: General Diffuse

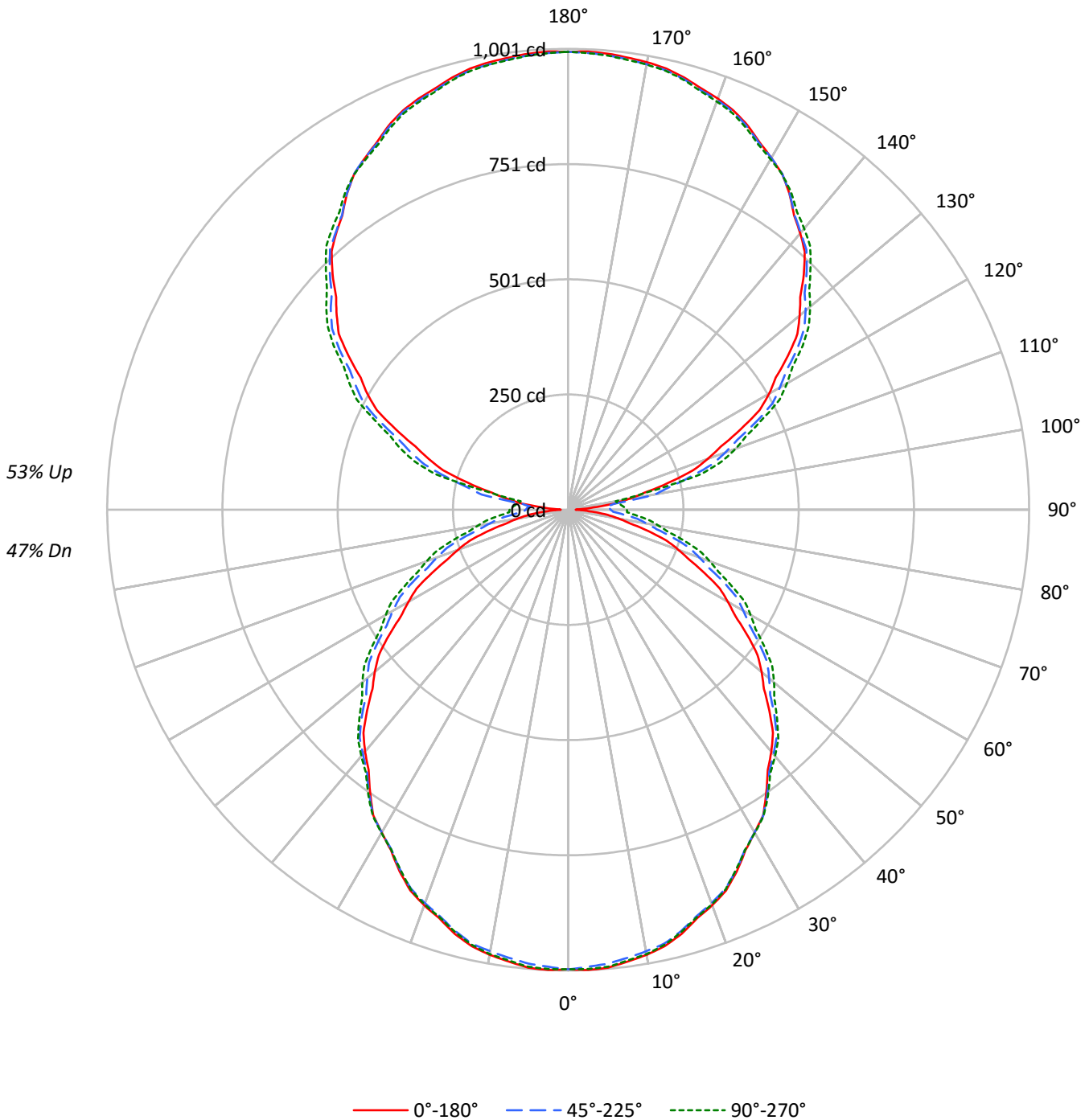
Input Watts (W): 45.9
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333226-830

CATALOG NUMBER: S125DIP-S850D810U830-4F0-1E-UDD-D

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°	6448	6448	6448
5°	6461	6330	6350
10°	6415	6216	6207
15°	6340	6081	6026
20°	6237	5914	5845
25°	6114	5735	5621
30°	5965	5538	5419
35°	5827	5357	5233
40°	5686	5166	5046
45°	5526	5003	4880
50°	5375	4826	4733
55°	5192	4659	4561
60°	4992	4468	4385
65°	4783	4270	4187
70°	4546	3997	3985
75°	4170	3735	3735
80°	3682	3416	3463
85°	3220	3204	3378



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	94.4	1.5
10°-20°	268.0	4.4
20°-30°	398.6	6.5
30°-40°	472.1	7.7
40°-50°	488.1	7.9
50°-60°	449.7	7.3
60°-70°	363.5	5.9
70°-80°	243.4	4.0
80°-90°	128.3	2.1
90°-100°	107.0	1.7
100°-110°	274.9	4.5
110°-120°	438.9	7.1
120°-130°	538.2	8.8
130°-140°	566.2	9.2
140°-150°	525.1	8.5
150°-160°	423.3	6.9
160°-170°	273.8	4.5
170°-180°	94.4	1.5
0°-30°	761.0	12.4
0°-40°	1233.2	20.1
0°-60°	2171.0	35.3
0°-90°	2906.2	47.3
90°-120°	820.8	13.4
90°-150°	2450.4	39.9
90°-180°	3242.0	52.7
0°-180°	6148.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	998	998	998	998	998	
5°	998	996	990	997	997	95
15°	954	954	948	953	950	268
25°	866	869	863	867	862	399
35°	750	756	754	757	757	469
45°	618	628	633	640	641	477
55°	475	490	506	516	521	424
65°	327	349	373	387	392	324
75°	180	206	237	256	261	191
85°	54	86	120	141	150	57
90°	16	54	92	117	127	12
95°	55	77	83	107	115	64
105°	226	245	274	292	299	239
115°	413	424	450	463	466	409
125°	583	588	606	618	622	520
135°	724	727	732	743	744	558
145°	838	838	838	843	843	523
155°	921	917	918	920	915	424
165°	972	968	969	972	967	275
175°	994	990	991	996	990	95
180°	994	994	994	994	994	



TEST NUMBER: P333226-830

CATALOG NUMBER: S125DIP-S850D810U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4
2.5°	1000.8	1000.5	1000.1	999.8	999.4	998.6	997.4	996.2	994.9	993.7	994.9
5°	998.4	998.1	997.6	997.1	996.7	995.7	994.2	992.7	991.2	989.7	991.4
7.5°	989.7	989.5	989.3	989.1	988.9	988.1	986.6	985.0	983.4	981.8	983.4
10°	981.8	981.8	981.8	981.8	981.8	981.0	979.2	977.5	975.7	974.0	975.5
12.5°	970.8	971.0	971.2	971.4	971.6	970.9	969.6	968.2	966.8	965.4	966.6
15°	953.5	953.7	953.9	954.0	954.3	953.7	952.2	950.6	949.0	947.5	948.9
17.5°	930.8	931.1	931.6	932.0	932.5	931.9	930.4	928.9	927.4	925.9	926.8
20°	914.3	914.7	915.1	915.6	916.1	915.5	914.0	912.5	910.9	909.4	910.0
22.5°	895.5	896.3	897.0	897.9	898.6	898.1	896.5	894.8	893.1	891.4	892.2
25°	866.3	867.0	867.6	868.3	868.9	868.6	867.3	866.0	864.7	863.4	864.2
27.5°	833.8	834.8	835.8	836.7	837.6	837.4	835.9	834.4	832.9	831.5	832.1
30°	809.5	810.9	812.2	813.4	814.7	814.7	813.4	812.2	810.9	809.5	810.0
32.5°	787.6	788.7	789.9	791.0	792.1	792.2	791.3	790.3	789.4	788.4	788.8
35°	749.8	751.4	752.9	754.4	755.9	756.4	755.7	755.1	754.4	753.8	754.4
37.5°	712.0	713.4	714.8	716.2	717.7	718.2	717.9	717.7	717.6	717.4	718.2
40°	686.2	688.0	689.7	691.4	693.1	693.9	693.7	693.5	693.2	693.1	693.9
42.5°	658.0	660.3	662.5	664.8	667.0	668.5	668.9	669.4	669.9	670.3	671.4
45°	617.6	620.1	622.5	624.8	627.3	629.0	630.1	631.1	632.3	633.3	634.9
47.5°	576.4	578.6	580.8	583.1	585.2	587.3	589.2	591.1	592.9	594.7	597.0
50°	548.2	550.5	553.0	555.3	557.7	560.2	562.5	565.0	567.3	569.7	572.1
52.5°	518.4	521.3	524.2	527.2	530.1	533.0	535.9	538.9	541.8	544.7	547.2
55°	474.8	478.2	481.7	485.2	488.7	492.2	495.7	499.2	502.6	506.1	508.5
57.5°	430.1	434.3	438.5	442.6	446.9	450.9	455.0	458.9	462.9	466.9	469.7
60°	400.4	404.7	409.1	413.4	417.7	422.2	426.5	430.8	435.2	439.5	442.8
62.5°	371.4	375.7	380.1	384.5	388.8	393.3	398.0	402.7	407.4	412.1	415.8
65°	327.0	332.0	337.0	342.0	346.9	352.0	357.3	362.5	367.8	373.0	376.3
67.5°	285.0	289.9	294.7	299.5	304.3	309.4	314.7	320.1	325.4	330.6	334.6
70°	254.5	259.5	264.5	269.6	274.6	279.8	285.5	291.2	296.8	302.5	306.6
72.5°	224.8	229.9	235.1	240.3	245.4	251.1	257.3	263.5	269.7	275.9	280.3
75°	180.1	185.8	191.4	197.1	202.7	209.1	216.0	223.0	229.9	236.9	241.2
77.5°	137.2	143.7	150.3	156.8	163.3	169.9	176.6	183.3	190.0	196.8	201.5
80°	110.7	117.2	123.7	130.2	136.8	143.6	151.1	158.4	165.9	173.2	178.0
82.5°	86.3	93.2	100.1	107.0	113.9	121.0	128.7	136.2	143.7	151.4	156.0
85°	53.8	61.0	68.2	75.4	82.6	89.9	97.6	105.2	112.8	120.4	125.2
87.5°	30.7	37.9	45.1	52.3	59.6	67.0	74.6	82.3	89.9	97.6	102.6
90°	16.4	24.7	33.0	41.2	49.5	57.9	66.4	74.9	83.5	92.1	97.9
92.5°	25.4	31.0	36.5	42.0	47.5	54.6	63.2	71.7	80.3	89.0	94.5
95°	54.8	59.9	65.0	70.2	75.4	78.6	79.7	80.9	82.1	83.2	88.9
97.5°	99.2	105.3	111.2	117.2	123.2	123.6	118.4	113.2	108.0	102.8	102.7
100°	133.8	138.9	144.0	149.0	154.1	160.4	168.1	175.7	183.3	190.9	171.1
102.5°	169.1	173.9	178.7	183.6	188.4	194.4	201.6	208.8	215.9	223.2	222.9
105°	225.6	229.7	233.8	237.9	242.0	247.4	253.9	260.4	266.9	273.5	277.9
107.5°	284.2	287.2	290.1	293.0	296.1	300.8	307.4	314.0	320.6	327.2	331.5
110°	322.3	325.0	327.5	330.2	332.8	337.3	343.7	350.2	356.6	363.0	366.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	358.9	361.4	363.8	366.4	368.8	373.2	379.3	385.3	391.4	397.6	400.9
115°	412.7	415.1	417.5	419.8	422.2	426.2	432.1	437.8	443.7	449.5	452.7
117.5°	468.5	469.5	470.5	471.5	472.4	475.9	481.8	487.9	493.8	499.7	502.7
120°	503.9	504.4	504.9	505.4	505.9	508.9	514.3	519.8	525.4	530.8	534.2
122.5°	534.4	535.3	536.2	537.2	538.1	541.1	546.1	551.2	556.3	561.3	564.5
125°	582.6	583.4	584.4	585.3	586.3	588.9	593.2	597.6	602.0	606.3	609.2
127.5°	627.7	628.3	629.0	629.5	630.1	632.2	635.7	639.1	642.5	646.0	648.8
130°	656.0	656.6	657.2	657.8	658.5	660.3	663.5	666.8	670.0	673.2	675.7
132.5°	683.5	684.5	685.3	686.3	687.2	688.6	690.6	692.6	694.6	696.5	699.6
135°	723.6	724.3	725.1	725.9	726.6	727.6	728.9	730.0	731.2	732.4	734.9
137.5°	760.4	761.1	761.8	762.4	763.1	763.6	764.1	764.6	765.0	765.4	768.1
140°	783.8	784.1	784.5	784.8	785.1	785.3	785.3	785.4	785.4	785.5	788.2
142.5°	805.6	805.6	805.7	805.7	805.7	805.9	806.2	806.4	806.6	806.9	809.1
145°	837.6	837.7	837.8	837.9	838.0	838.1	838.1	838.1	838.1	838.1	839.3
147.5°	864.6	864.6	864.5	864.4	864.4	864.4	864.6	864.8	865.1	865.3	865.7
150°	882.3	882.0	881.7	881.4	881.0	881.0	881.4	881.7	882.0	882.3	882.7
152.5°	899.5	898.7	898.0	897.3	896.5	896.4	896.6	897.0	897.3	897.7	898.0
155°	921.4	920.4	919.5	918.4	917.5	917.1	917.5	917.8	918.1	918.4	918.9
157.5°	938.3	937.7	937.2	936.6	935.9	935.7	935.8	935.8	935.8	935.9	936.3
160°	950.2	949.1	948.2	947.2	946.2	945.8	945.9	946.1	946.3	946.4	947.1
162.5°	959.6	958.6	957.6	956.6	955.6	955.3	955.4	955.5	955.7	955.9	956.8
165°	972.2	971.3	970.3	969.3	968.3	967.9	968.1	968.3	968.4	968.6	969.6
167.5°	981.7	980.7	979.7	978.6	977.6	977.2	977.3	977.5	977.7	977.9	979.0
170°	987.0	985.8	984.7	983.5	982.4	981.9	982.0	982.2	982.4	982.6	983.9
172.5°	990.5	989.4	988.3	987.1	985.9	985.5	985.8	986.1	986.4	986.7	987.9
175°	994.4	993.3	992.4	991.5	990.4	990.0	990.1	990.3	990.5	990.7	992.0
177.5°	996.2	995.3	994.6	993.8	993.0	992.7	992.8	992.9	993.1	993.2	994.1
180°	994.4	994.4	994.4	994.4	994.4	994.4	994.4	994.4	994.4	994.4	994.4



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	998.4	998.4	998.4	998.4	998.4	998.4	998.4	998.4
2.5°	996.2	997.4	998.6	999.2	999.0	998.8	998.6	998.4
5°	993.2	994.9	996.6	997.4	997.1	996.9	996.7	996.6
7.5°	984.9	986.4	987.9	988.5	988.4	988.2	987.9	987.7
10°	977.0	978.5	980.1	980.7	980.5	980.3	980.1	979.9
12.5°	967.7	968.9	970.1	970.3	969.8	969.2	968.7	968.1
15°	950.2	951.5	952.8	953.0	952.2	951.2	950.4	949.5
17.5°	927.8	928.9	929.8	930.1	929.5	929.1	928.5	928.0
20°	910.7	911.3	912.0	912.3	912.3	912.3	912.3	912.3
22.5°	893.1	893.8	894.7	894.8	894.3	893.8	893.2	892.8
25°	865.2	866.0	866.9	866.8	865.6	864.6	863.5	862.4
27.5°	832.6	833.3	833.9	834.1	833.6	833.2	832.8	832.5
30°	810.4	810.9	811.2	811.4	811.2	811.0	810.8	810.5
32.5°	789.3	789.7	790.1	790.2	790.0	789.9	789.6	789.4
35°	755.1	755.7	756.4	756.7	756.7	756.7	756.7	756.7
37.5°	719.1	719.9	720.8	721.2	721.1	721.0	721.0	720.9
40°	694.7	695.7	696.5	697.2	697.6	698.0	698.5	698.9
42.5°	672.4	673.4	674.5	675.0	675.1	675.2	675.3	675.4
45°	636.4	637.9	639.4	640.3	640.6	640.7	640.9	641.2
47.5°	599.2	601.4	603.6	605.0	605.5	606.0	606.4	606.9
50°	574.5	576.9	579.3	580.8	581.5	582.1	582.8	583.4
52.5°	549.8	552.3	554.9	556.5	556.9	557.4	557.9	558.4
55°	510.9	513.3	515.7	517.3	518.1	519.1	519.9	520.8
57.5°	472.4	475.1	477.9	479.6	480.2	480.9	481.5	482.2
60°	446.0	449.3	452.6	454.5	455.2	455.8	456.5	457.1
62.5°	419.3	422.9	426.6	428.8	429.6	430.5	431.2	432.1
65°	379.5	382.8	386.0	388.0	389.0	389.8	390.7	391.5
67.5°	338.6	342.5	346.5	349.0	350.2	351.3	352.4	353.5
70°	310.8	314.9	319.1	321.7	323.0	324.3	325.6	327.0
72.5°	284.8	289.3	293.8	296.5	297.5	298.4	299.4	300.3
75°	245.6	250.0	254.3	257.0	258.1	259.2	260.2	261.4
77.5°	206.3	211.1	215.9	218.8	219.6	220.5	221.3	222.3
80°	182.9	187.7	192.4	195.2	196.1	197.0	197.8	198.7
82.5°	160.5	165.1	169.8	172.9	174.5	176.0	177.6	179.2
85°	130.0	134.8	139.6	142.8	144.6	146.3	148.1	149.8
87.5°	107.8	113.0	118.2	121.6	123.2	124.8	126.4	128.1
90°	103.7	109.5	115.4	119.2	121.3	123.3	125.4	127.3
92.5°	100.2	105.8	111.5	115.2	117.0	118.8	120.5	122.2
95°	94.4	100.1	105.7	109.2	110.7	112.3	113.8	115.4
97.5°	102.7	102.6	102.6	103.3	104.8	106.3	107.7	109.2
100°	151.2	131.4	111.6	102.0	102.6	103.3	103.9	104.5
102.5°	222.7	222.4	222.3	217.3	207.4	197.6	187.8	177.9
105°	282.2	286.5	290.9	293.8	295.1	296.4	297.8	299.2
107.5°	335.8	340.2	344.5	347.1	348.0	348.8	349.7	350.5
110°	370.2	373.9	377.5	380.2	381.9	383.6	385.2	386.9



TEST NUMBER: P333226-830

CATALOG NUMBER: S125DIP-S850D810U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	404.3	407.6	410.9	413.2	414.5	415.8	417.1	418.4
115°	456.0	459.3	462.5	464.3	464.7	465.0	465.2	465.6
117.5°	505.5	508.3	511.1	513.1	514.2	515.2	516.2	517.4
120°	537.6	540.9	544.3	546.3	546.8	547.2	547.7	548.2
122.5°	567.7	570.9	574.1	575.9	576.3	576.6	576.9	577.3
125°	612.0	614.8	617.6	619.3	619.9	620.5	621.1	621.7
127.5°	651.8	654.6	657.4	658.9	658.9	659.0	659.0	659.1
130°	678.3	680.8	683.3	684.8	685.0	685.3	685.6	685.9
132.5°	702.5	705.4	708.3	709.9	710.0	710.1	710.2	710.3
135°	737.4	739.9	742.4	743.8	743.9	743.9	744.0	744.1
137.5°	770.7	773.4	776.0	777.3	777.3	777.3	777.3	777.4
140°	791.0	793.6	796.4	797.7	797.6	797.5	797.4	797.2
142.5°	811.2	813.2	815.4	816.3	816.2	816.1	816.1	816.0
145°	840.6	841.9	843.1	843.7	843.6	843.5	843.3	843.2
147.5°	866.3	866.9	867.4	867.2	866.5	865.7	864.9	864.1
150°	883.0	883.4	883.6	883.3	882.1	881.1	880.0	878.9
152.5°	898.3	898.6	899.0	898.5	897.4	896.3	895.1	894.0
155°	919.5	919.9	920.4	920.0	918.7	917.4	916.1	914.7
157.5°	936.9	937.5	937.9	937.5	936.2	934.9	933.6	932.3
160°	947.7	948.4	949.0	948.8	947.4	946.1	944.8	943.5
162.5°	957.7	958.7	959.5	959.3	957.8	956.4	955.0	953.6
165°	970.5	971.5	972.5	972.3	971.0	969.7	968.4	967.0
167.5°	980.2	981.4	982.6	982.4	980.9	979.5	978.0	976.6
170°	985.1	986.5	987.8	987.7	986.3	984.8	983.3	981.8
172.5°	989.0	990.2	991.5	991.3	989.8	988.4	986.8	985.3
175°	993.3	994.6	995.9	995.8	994.4	992.9	991.5	990.0
177.5°	995.0	995.9	996.8	996.8	995.7	994.7	993.6	992.6
180°	994.4	994.4	994.4	994.4	994.4	994.4	994.4	994.4

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