

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: P333181-830

Luminaire Tested: **S125DIP-S610D810U830-4F0-1E-UDD-D**

Issue Date: 3/3/2020

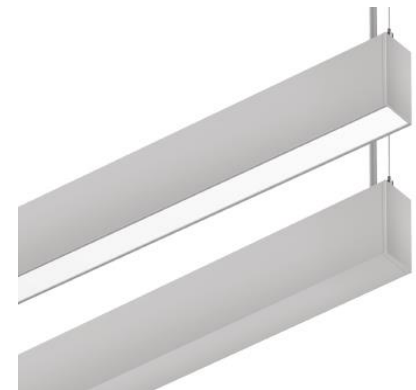
Test Information

Test Method: LM-79-08
Report Number: P333181-830
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-S610D810U830-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 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: 5318.0 lumens
Efficiency: N/A
Efficacy: 138.5 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-Indirect

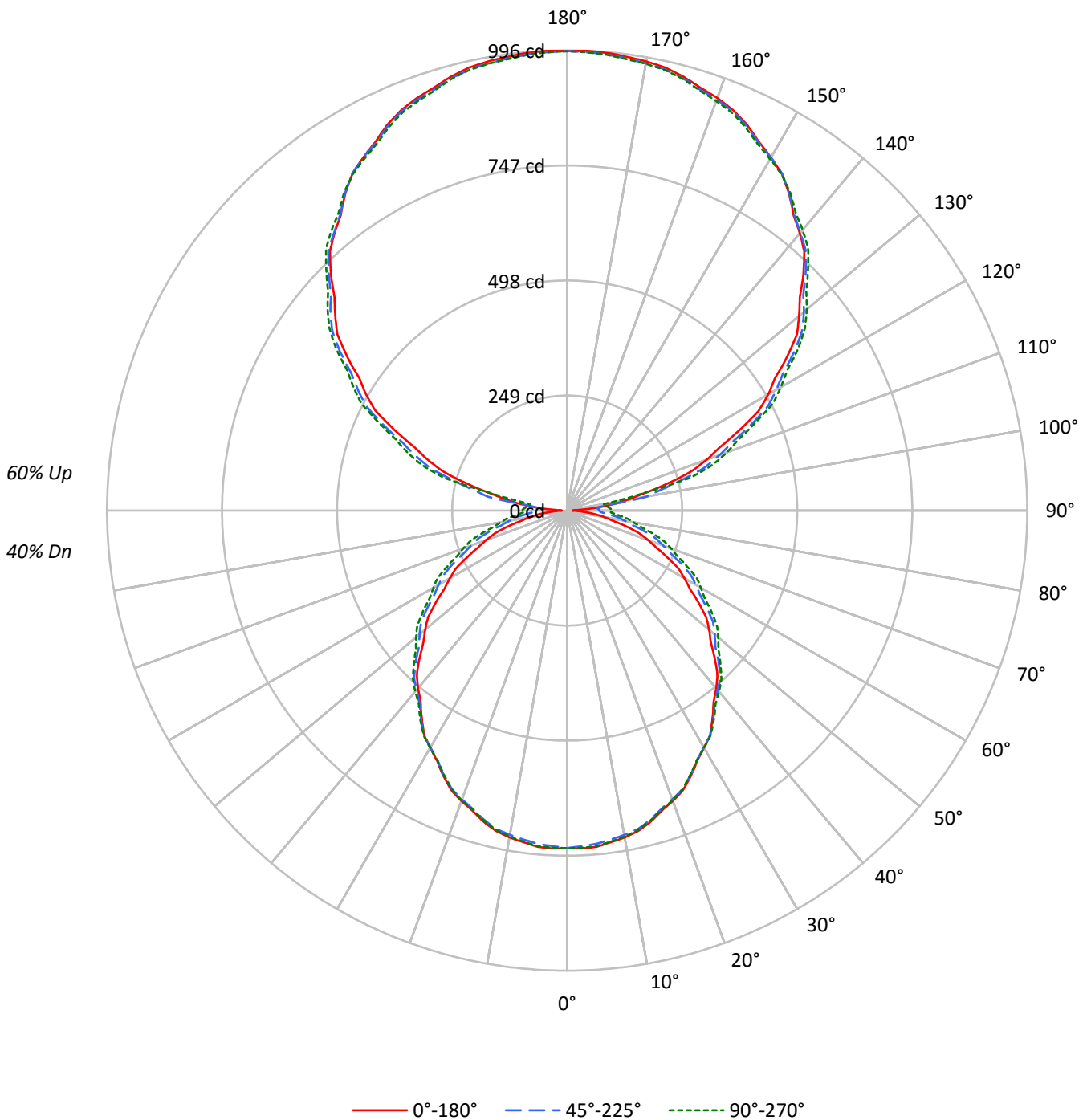
Input Watts (W): 38.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333181-830

CATALOG NUMBER: S125DIP-S610D810U830-4F0-1E-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	105	105	105	105	95	95	95	95	78	78	78	62	62	62	47	47	47	40
1	95	90	86	83	86	82	79	76	67	65	63	53	52	50	41	39	38	32
2	86	79	72	67	78	72	66	62	59	55	51	46	44	41	35	33	32	27
3	78	69	61	56	71	63	56	51	51	47	43	41	38	35	31	29	27	22
4	72	61	53	47	65	55	49	43	46	40	36	36	33	30	28	25	23	19
5	66	54	46	40	59	49	42	37	41	35	31	32	29	25	25	22	20	16
6	60	48	40	34	55	44	37	32	36	31	27	29	25	22	22	20	17	14
7	56	43	36	30	51	40	33	28	33	28	24	27	23	20	20	18	15	13
8	52	39	32	26	47	36	29	25	30	25	21	24	20	17	19	16	14	11
9	48	36	28	23	44	33	26	22	27	22	19	22	18	15	17	14	12	10
10	45	33	26	21	41	30	24	19	25	20	17	21	17	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	4718	4718	4718
5°	4727	4630	4645
10°	4693	4548	4541
15°	4638	4449	4409
20°	4562	4326	4276
25°	4473	4195	4112
30°	4364	4051	3964
35°	4263	3919	3829
40°	4160	3779	3691
45°	4043	3661	3570
50°	3932	3531	3463
55°	3798	3408	3337
60°	3652	3269	3208
65°	3499	3124	3063
70°	3326	2924	2915
75°	3052	2732	2732
80°	2694	2501	2532
85°	2358	2344	2469



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	69.1	1.3
10°-20°	196.1	3.7
20°-30°	291.6	5.5
30°-40°	345.4	6.5
40°-50°	357.1	6.7
50°-60°	329.0	6.2
60°-70°	265.9	5.0
70°-80°	178.1	3.3
80°-90°	94.4	1.8
90°-100°	88.0	1.7
100°-110°	260.9	4.9
110°-120°	429.5	8.1
120°-130°	532.9	10.0
130°-140°	563.9	10.6
140°-150°	524.6	9.9
150°-160°	423.3	8.0
160°-170°	273.8	5.1
170°-180°	94.4	1.8
0°-30°	556.7	10.5
0°-40°	902.2	17.0
0°-60°	1588.2	29.9
0°-90°	2126.7	40.0
90°-120°	778.4	14.6
90°-150°	2399.8	45.1
90°-180°	3191.0	60.0
0°-180°	5318.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	730	730	730	730	730	
5°	730	729	724	729	729	69
15°	698	698	693	697	695	196
25°	634	636	632	634	631	292
35°	549	553	551	554	554	343
45°	452	460	463	468	469	349
55°	347	359	370	378	381	310
65°	239	256	273	283	286	237
75°	132	151	173	187	191	140
85°	39	63	88	103	110	42
90°	12	41	70	90	98	9
95°	51	67	64	83	88	61
105°	223	238	259	273	278	237
115°	411	421	439	449	449	407
125°	582	586	600	608	610	519
135°	723	727	730	738	737	557
145°	837	838	838	842	841	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: P333181-830

CATALOG NUMBER: S125DIP-S610D810U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5
2.5°	732.2	731.9	731.7	731.4	731.1	730.6	729.7	728.8	727.9	727.0	727.9
5°	730.5	730.1	729.8	729.5	729.2	728.5	727.4	726.2	725.1	724.0	725.3
7.5°	724.0	723.9	723.8	723.6	723.5	722.8	721.7	720.6	719.4	718.3	719.3
10°	718.3	718.3	718.3	718.3	718.3	717.7	716.3	715.1	713.8	712.6	713.7
12.5°	710.3	710.4	710.5	710.7	710.8	710.3	709.3	708.3	707.3	706.2	707.1
15°	697.5	697.7	697.9	698.0	698.1	697.7	696.5	695.4	694.4	693.2	694.2
17.5°	680.9	681.2	681.6	681.8	682.2	681.7	680.7	679.6	678.4	677.3	678.1
20°	668.8	669.2	669.5	669.9	670.1	669.8	668.6	667.5	666.4	665.2	665.7
22.5°	655.2	655.7	656.3	656.9	657.4	657.0	655.8	654.6	653.4	652.1	652.7
25°	633.8	634.2	634.7	635.2	635.7	635.5	634.5	633.6	632.5	631.6	632.3
27.5°	610.0	610.7	611.4	612.1	612.8	612.7	611.5	610.5	609.4	608.3	608.7
30°	592.2	593.2	594.2	595.1	596.1	596.1	595.1	594.2	593.2	592.2	592.6
32.5°	576.2	577.0	577.9	578.7	579.5	579.6	578.9	578.2	577.5	576.7	577.1
35°	548.6	549.7	550.8	551.9	553.0	553.4	552.9	552.3	551.9	551.4	551.9
37.5°	520.9	522.0	522.9	524.0	525.0	525.4	525.3	525.1	524.9	524.8	525.4
40°	502.0	503.3	504.5	505.9	507.1	507.7	507.5	507.4	507.2	507.0	507.7
42.5°	481.4	483.1	484.7	486.4	488.0	489.0	489.4	489.7	490.0	490.4	491.2
45°	451.9	453.6	455.3	457.1	458.9	460.1	461.0	461.8	462.5	463.4	464.5
47.5°	421.7	423.3	424.9	426.5	428.2	429.6	431.0	432.3	433.8	435.1	436.8
50°	401.1	402.7	404.5	406.3	408.0	409.8	411.5	413.3	415.0	416.8	418.6
52.5°	379.3	381.4	383.5	385.7	387.8	389.9	392.1	394.2	396.3	398.4	400.3
55°	347.3	349.9	352.4	355.0	357.5	360.1	362.6	365.1	367.7	370.2	372.0
57.5°	314.7	317.7	320.7	323.9	326.9	329.9	332.8	335.7	338.7	341.6	343.6
60°	292.9	296.1	299.3	302.5	305.7	308.8	312.0	315.2	318.4	321.5	324.0
62.5°	271.7	274.8	278.1	281.3	284.5	287.8	291.2	294.6	298.0	301.5	304.2
65°	239.2	242.9	246.5	250.2	253.8	257.6	261.4	265.2	269.0	272.9	275.2
67.5°	208.6	212.1	215.6	219.1	222.6	226.4	230.3	234.1	238.0	242.0	244.8
70°	186.2	189.8	193.5	197.2	200.9	204.7	208.9	213.0	217.2	221.3	224.3
72.5°	164.4	168.2	172.0	175.8	179.6	183.7	188.2	192.7	197.3	201.8	205.1
75°	131.8	135.9	140.1	144.2	148.4	153.0	158.1	163.2	168.2	173.3	176.4
77.5°	100.4	105.2	110.0	114.7	119.5	124.3	129.2	134.1	139.0	143.9	147.4
80°	81.0	85.7	90.5	95.3	100.0	105.1	110.6	115.9	121.3	126.8	130.3
82.5°	63.2	68.1	73.2	78.2	83.3	88.6	94.1	99.6	105.2	110.7	114.0
85°	39.4	44.7	49.9	55.1	60.4	65.8	71.4	76.9	82.5	88.1	91.6
87.5°	22.5	27.8	33.2	38.5	43.9	49.4	55.0	60.7	66.4	72.0	75.8
90°	12.2	18.6	25.0	31.4	37.8	44.3	50.8	57.4	64.0	70.5	75.0
92.5°	21.7	25.4	29.2	33.1	36.9	42.0	48.5	55.1	61.6	68.2	72.6
95°	51.4	55.0	58.6	62.3	65.9	67.3	66.5	65.7	64.8	64.1	68.4
97.5°	96.1	100.8	105.4	110.0	114.6	113.4	106.2	99.2	92.1	84.9	83.7
100°	131.0	134.8	138.6	142.5	146.3	151.1	156.8	162.6	168.3	174.1	153.1
102.5°	166.4	170.1	173.8	177.5	181.3	185.8	191.1	196.4	201.8	207.2	205.8
105°	223.2	226.4	229.6	232.7	235.9	240.0	244.7	249.5	254.3	259.0	262.2
107.5°	282.1	284.3	286.4	288.6	290.8	294.4	299.3	304.2	309.1	314.0	317.2
110°	320.5	322.4	324.3	326.2	328.1	331.5	336.3	341.0	345.8	350.6	353.2



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CATALOG NUMBER: S125DIP-S610D810U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	357.0	359.0	360.9	362.8	364.8	368.0	372.5	377.0	381.5	386.1	388.3
115°	411.1	413.1	415.0	417.0	419.0	422.1	426.3	430.6	434.9	439.2	441.5
117.5°	467.2	467.9	468.6	469.3	470.0	472.7	477.2	481.7	486.3	490.8	492.7
120°	502.6	502.9	503.2	503.5	503.9	506.1	510.2	514.4	518.6	522.7	525.1
122.5°	533.3	534.1	535.0	535.8	536.7	538.9	542.7	546.5	550.3	554.0	556.3
125°	581.5	582.5	583.4	584.5	585.4	587.5	590.7	593.9	597.1	600.3	602.2
127.5°	626.9	627.5	628.2	628.9	629.5	631.1	633.7	636.2	638.7	641.2	643.2
130°	655.3	655.9	656.6	657.2	657.9	659.4	661.8	664.2	666.6	668.9	670.7
132.5°	683.0	683.9	684.8	685.7	686.6	687.8	689.1	690.5	691.8	693.2	695.3
135°	723.0	723.9	724.7	725.6	726.3	727.2	727.9	728.8	729.5	730.3	732.1
137.5°	759.9	760.6	761.4	762.1	762.8	763.3	763.6	763.8	764.0	764.3	766.2
140°	783.5	783.8	784.2	784.5	784.9	785.0	784.9	784.9	784.9	784.9	787.0
142.5°	805.3	805.4	805.5	805.6	805.6	805.8	806.1	806.3	806.5	806.8	808.4
145°	837.4	837.5	837.6	837.8	838.0	838.1	838.1	838.1	838.1	838.1	839.1
147.5°	864.6	864.6	864.5	864.4	864.4	864.4	864.6	864.8	865.1	865.3	865.6
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°	730.5	730.5	730.5	730.5	730.5	730.5	730.5	730.5
2.5°	728.8	729.7	730.6	730.9	730.8	730.8	730.6	730.5
5°	726.5	727.8	729.1	729.6	729.5	729.3	729.2	729.1
7.5°	720.5	721.6	722.7	723.2	723.0	722.9	722.7	722.6
10°	714.8	715.9	717.0	717.5	717.4	717.2	717.0	716.8
12.5°	707.9	708.8	709.7	709.9	709.5	709.1	708.7	708.2
15°	695.1	696.1	697.0	697.2	696.5	695.9	695.3	694.7
17.5°	678.8	679.5	680.2	680.4	680.0	679.7	679.3	678.9
20°	666.3	666.8	667.2	667.4	667.4	667.4	667.4	667.4
22.5°	653.3	653.9	654.5	654.6	654.2	653.8	653.5	653.1
25°	632.9	633.6	634.1	634.1	633.3	632.5	631.7	630.9
27.5°	609.2	609.6	610.1	610.1	609.8	609.5	609.3	609.0
30°	592.9	593.2	593.5	593.6	593.4	593.2	593.1	593.0
32.5°	577.4	577.7	578.1	578.2	578.0	577.8	577.7	577.5
35°	552.3	552.9	553.4	553.6	553.6	553.6	553.6	553.6
37.5°	526.0	526.7	527.4	527.6	527.5	527.4	527.4	527.4
40°	508.3	509.0	509.5	510.0	510.4	510.7	511.0	511.3
42.5°	491.9	492.7	493.4	493.9	494.0	494.0	494.1	494.2
45°	465.5	466.7	467.8	468.4	468.6	468.7	468.9	469.1
47.5°	438.4	440.0	441.6	442.6	443.0	443.3	443.7	444.0
50°	420.3	422.1	423.8	424.9	425.4	425.8	426.3	426.8
52.5°	402.2	404.1	406.0	407.1	407.5	407.7	408.1	408.5
55°	373.7	375.5	377.2	378.4	379.1	379.8	380.3	381.0
57.5°	345.6	347.6	349.6	350.8	351.4	351.9	352.3	352.8
60°	326.3	328.7	331.1	332.5	333.0	333.5	333.9	334.4
62.5°	306.8	309.4	312.1	313.7	314.2	314.9	315.5	316.1
65°	277.6	280.0	282.4	283.9	284.6	285.2	285.8	286.4
67.5°	247.7	250.6	253.4	255.3	256.2	257.0	257.9	258.6
70°	227.3	230.4	233.4	235.4	236.3	237.2	238.3	239.2
72.5°	208.4	211.6	214.9	216.9	217.6	218.3	219.0	219.7
75°	179.6	182.9	186.1	188.0	188.8	189.6	190.4	191.2
77.5°	150.9	154.5	158.0	160.0	160.6	161.3	161.9	162.6
80°	133.7	137.2	140.7	142.8	143.5	144.1	144.8	145.3
82.5°	117.4	120.8	124.2	126.5	127.6	128.8	129.9	131.0
85°	95.1	98.6	102.1	104.4	105.8	107.0	108.3	109.5
87.5°	79.6	83.4	87.3	89.8	91.0	92.2	93.4	94.6
90°	79.5	84.0	88.4	91.5	93.1	94.7	96.3	97.9
92.5°	76.9	81.2	85.7	88.5	89.8	91.1	92.5	93.9
95°	72.7	77.0	81.3	84.1	85.2	86.3	87.4	88.5
97.5°	82.4	81.2	79.8	79.7	80.9	81.9	83.0	84.1
100°	132.0	110.9	89.8	79.5	79.7	80.0	80.3	80.7
102.5°	204.3	202.9	201.5	195.8	185.6	175.4	165.2	155.0
105°	265.4	268.6	271.7	273.8	274.8	275.8	276.7	277.7
107.5°	320.4	323.6	326.7	328.6	329.0	329.5	330.1	330.5
110°	355.7	358.2	360.7	362.7	363.9	365.2	366.5	367.8



TEST NUMBER: P333181-830

CATALOG NUMBER: S125DIP-S610D810U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	390.6	392.9	395.1	396.7	397.7	398.5	399.4	400.3
115°	443.7	445.8	448.1	449.1	449.1	449.1	449.1	449.0
117.5°	494.5	496.3	498.2	499.5	500.1	500.8	501.4	502.1
120°	527.4	529.8	532.3	533.5	533.6	533.8	533.9	534.0
122.5°	558.6	560.8	563.0	564.1	564.1	564.1	564.2	564.2
125°	604.1	606.0	607.8	608.9	609.3	609.5	609.8	610.1
127.5°	645.2	647.1	649.1	650.1	649.7	649.4	649.1	648.8
130°	672.4	674.2	675.9	676.7	676.7	676.7	676.7	676.7
132.5°	697.5	699.6	701.7	702.8	702.6	702.4	702.3	702.1
135°	733.8	735.6	737.3	738.0	737.8	737.6	737.4	737.3
137.5°	768.2	770.2	772.0	772.9	772.7	772.5	772.3	772.0
140°	789.1	791.2	793.3	794.2	793.8	793.4	793.1	792.8
142.5°	809.9	811.5	813.0	813.7	813.3	813.0	812.7	812.3
145°	840.0	840.9	842.0	842.3	841.9	841.5	841.2	840.8
147.5°	866.1	866.6	867.0	866.8	865.9	865.1	864.1	863.3
150°	883.0	883.4	883.6	883.3	882.0	880.9	879.8	878.6
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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