

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: P333176-830

Luminaire Tested: **S125DIP-S610D590U830-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333176-830
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-S610D590U830-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 610 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4285.0 lumens
Efficiency: N/A
Efficacy: 130.6 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.18 / 1.31
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: General Diffuse

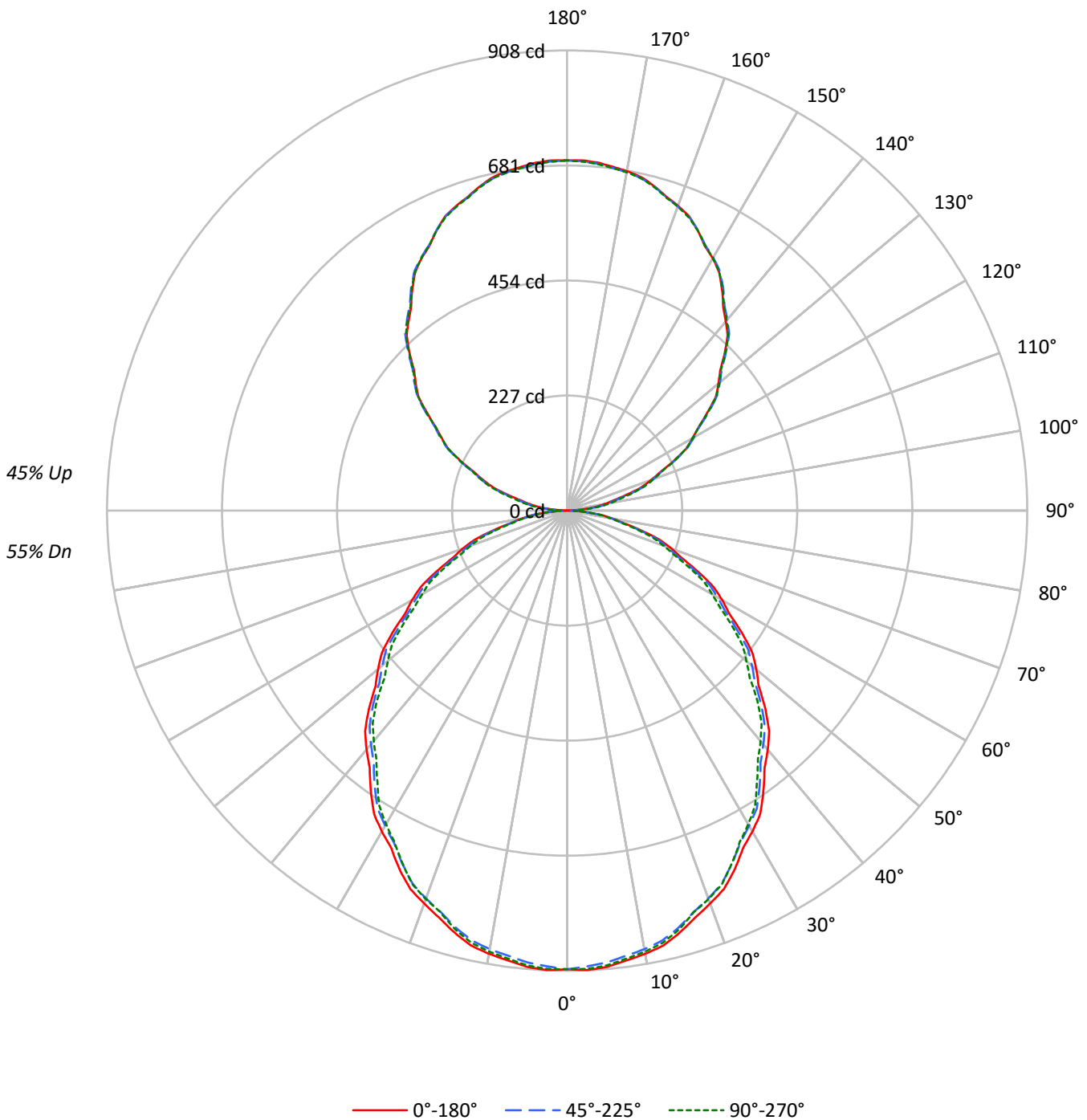
Input Watts (W): 32.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P333176-830

CATALOG NUMBER: S125DIP-S610D590U830-4F0-1E-UDD-F1

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	108	108	108	108	101	101	101	101	86	86	86	73	73	73	61	61	61	55
1	99	94	90	87	92	88	84	81	75	73	71	64	62	61	54	52	51	46
2	90	82	76	71	83	77	71	67	66	62	58	56	53	51	47	45	43	39
3	82	72	65	59	76	68	61	56	58	53	49	50	46	43	42	39	37	33
4	75	64	56	50	69	60	53	47	52	46	42	44	40	37	37	34	32	28
5	69	57	49	43	64	53	46	41	46	41	36	40	35	32	34	30	27	24
6	64	51	43	37	59	48	41	35	42	36	31	36	31	28	30	27	24	21
7	59	46	38	33	54	43	36	31	38	32	28	33	28	25	28	24	21	19
8	55	42	34	29	51	39	32	27	35	29	25	30	25	22	26	22	19	17
9	51	38	31	26	47	36	29	25	32	26	22	28	23	20	24	20	17	15
10	47	35	28	23	44	33	27	22	29	24	20	25	21	18	22	18	16	14

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	5846	5846	5846
5°	5859	5803	5841
10°	5823	5762	5795
15°	5760	5693	5717
20°	5670	5597	5606
25°	5573	5481	5476
30°	5452	5357	5330
35°	5324	5222	5149
40°	5193	5078	5005
45°	5050	4945	4847
50°	4893	4786	4641
55°	4741	4604	4476
60°	4561	4421	4265
65°	4345	4202	4060
70°	4137	3950	3814
75°	3770	3646	3521
80°	3355	3303	3221
85°	2920	2971	2816



TEST NUMBER: P333176-830

CATALOG NUMBER: S125DIP-S610D590U830-4F0-1E-UDD-F1

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	85.3	2.0
10°-20°	241.1	5.6
20°-30°	356.0	8.3
30°-40°	415.4	9.7
40°-50°	417.2	9.7
50°-60°	366.2	8.5
60°-70°	272.9	6.4
70°-80°	156.0	3.6
80°-90°	46.9	1.1
90°-100°	46.3	1.1
100°-110°	136.7	3.2
110°-120°	231.5	5.4
120°-130°	304.6	7.1
130°-140°	341.3	8.0
140°-150°	334.5	7.8
150°-160°	281.0	6.6
160°-170°	186.8	4.4
170°-180°	65.4	1.5
0°-30°	682.4	15.9
0°-40°	1097.8	25.6
0°-60°	1881.2	43.9
0°-90°	2357.0	55.0
90°-120°	414.4	9.7
90°-150°	1394.9	32.6
90°-180°	1928.0	45.0
0°-180°	4285.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	905	905	905	905	905	
5°	904	902	895	901	901	86
15°	862	859	852	855	855	243
25°	782	778	769	770	768	360
35°	675	672	662	659	653	422
45°	553	550	541	533	531	426
55°	421	418	409	403	398	376
65°	284	282	275	269	266	282
75°	151	150	146	144	141	161
85°	39	40	40	39	38	44
90°	1	5	9	11	13	4
95°	35	36	41	45	46	37
105°	123	125	128	132	133	131
115°	232	234	235	234	234	229
125°	338	341	342	341	340	303
135°	440	443	444	444	442	339
145°	533	535	537	536	535	333
155°	610	610	610	612	610	281
165°	663	662	662	664	661	187
175°	689	687	687	690	687	65
180°	691	691	691	691	691	



TEST NUMBER: P333176-830

CATALOG NUMBER: S125DIP-S610D590U830-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2
2.5°	907.5	907.1	906.7	906.3	906.0	905.1	903.9	902.6	901.4	900.0	901.4
5°	903.8	903.4	903.1	902.8	902.5	901.5	899.9	898.3	896.7	895.1	896.6
7.5°	895.4	895.1	894.8	894.5	894.2	893.2	891.4	889.7	887.9	886.2	887.5
10°	888.0	887.7	887.4	887.0	886.7	885.7	883.9	882.2	880.4	878.7	880.0
12.5°	878.8	878.3	877.7	877.1	876.6	875.4	873.8	872.2	870.5	868.9	870.0
15°	861.5	861.0	860.5	860.1	859.6	858.5	856.8	855.0	853.2	851.5	852.2
17.5°	841.6	840.9	840.2	839.5	838.8	837.5	835.8	833.9	832.1	830.3	831.2
20°	825.0	824.6	824.3	824.1	823.7	822.6	820.5	818.4	816.3	814.3	815.4
22.5°	808.3	807.8	807.2	806.6	806.1	804.8	802.9	801.0	799.0	797.0	797.8
25°	782.0	781.2	780.4	779.7	778.8	777.4	775.3	773.3	771.2	769.1	769.5
27.5°	751.2	750.7	750.3	749.8	749.3	748.0	745.8	743.8	741.6	739.5	739.5
30°	731.1	730.7	730.2	729.7	729.2	727.8	725.5	723.0	720.7	718.3	717.9
32.5°	709.4	708.7	707.9	707.2	706.4	705.0	702.9	700.8	698.6	696.5	696.0
35°	675.3	674.7	674.0	673.4	672.8	671.4	669.1	666.8	664.7	662.4	661.7
37.5°	639.9	639.1	638.4	637.5	636.8	635.3	633.2	631.1	629.0	626.9	625.8
40°	615.9	615.1	614.3	613.5	612.7	611.1	609.0	606.7	604.5	602.3	600.9
42.5°	590.1	589.5	588.7	588.1	587.4	586.0	583.7	581.5	579.3	577.0	575.8
45°	552.9	552.2	551.6	550.9	550.4	549.0	547.1	545.3	543.3	541.4	539.5
47.5°	512.7	512.7	512.8	512.8	512.8	511.7	509.4	507.2	504.9	502.6	500.7
50°	487.0	486.4	486.0	485.5	485.0	483.9	481.9	480.0	478.2	476.3	474.2
52.5°	460.6	460.2	460.0	459.6	459.2	458.0	456.0	453.9	451.9	449.9	448.1
55°	421.1	420.6	420.1	419.6	419.1	417.8	415.6	413.4	411.1	408.9	407.5
57.5°	379.4	379.2	378.9	378.6	378.4	377.3	375.4	373.5	371.6	369.9	368.0
60°	353.1	352.4	351.8	351.1	350.5	349.3	347.6	345.8	344.0	342.3	340.7
62.5°	325.6	325.1	324.5	324.0	323.5	322.5	321.0	319.5	318.0	316.5	314.8
65°	284.3	284.0	283.7	283.3	283.0	282.0	280.2	278.5	276.7	275.0	273.5
67.5°	244.3	243.6	243.0	242.3	241.7	240.7	239.4	238.1	236.8	235.4	234.2
70°	219.1	218.4	217.5	216.8	215.9	214.8	213.4	212.0	210.6	209.2	208.1
72.5°	191.6	191.1	190.6	190.0	189.5	188.7	187.8	186.9	186.0	185.0	184.0
75°	151.1	150.8	150.4	150.1	149.9	149.3	148.5	147.7	146.8	146.1	145.6
77.5°	113.8	113.6	113.5	113.3	113.2	112.9	112.4	112.1	111.6	111.1	110.8
80°	90.2	90.2	90.2	90.2	90.2	90.1	89.7	89.4	89.2	88.8	88.6
82.5°	69.7	69.4	69.1	68.8	68.6	68.4	68.3	68.3	68.2	68.1	67.9
85°	39.4	39.6	39.7	39.9	40.1	40.1	40.1	40.1	40.1	40.1	40.0
87.5°	15.6	15.7	15.9	16.1	16.3	16.5	16.5	16.5	16.6	16.6	16.8
90°	0.6	1.5	2.5	3.4	4.3	5.3	6.1	7.0	7.7	8.6	9.2
92.5°	13.0	13.7	14.3	15.0	15.6	16.5	17.5	18.6	19.6	20.6	21.4
95°	35.0	35.2	35.4	35.6	35.9	36.7	37.8	39.0	40.2	41.4	42.2
97.5°	58.1	58.2	58.2	58.3	58.4	59.3	61.0	62.6	64.3	65.9	66.7
100°	75.3	75.3	75.3	75.3	75.3	76.1	77.6	79.2	80.7	82.3	83.3
102.5°	93.8	94.3	94.7	95.2	95.7	96.3	97.1	97.9	98.7	99.4	100.7
105°	122.6	123.2	123.8	124.4	125.0	125.6	126.4	127.1	127.8	128.5	129.2
107.5°	154.4	155.0	155.6	156.2	156.8	157.4	158.0	158.4	159.0	159.6	159.9
110°	176.3	176.9	177.6	178.1	178.8	179.3	179.6	179.9	180.3	180.7	181.1



TEST NUMBER: P333176-830

CATALOG NUMBER: S125DIP-S610D590U830-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	198.7	199.1	199.3	199.6	200.0	200.4	200.9	201.2	201.7	202.2	202.4
115°	231.8	232.2	232.7	233.2	233.7	234.0	234.2	234.5	234.7	235.0	234.9
117.5°	264.9	265.0	265.3	265.5	265.7	266.0	266.2	266.4	266.6	266.8	266.9
120°	285.5	286.2	286.7	287.3	287.9	288.2	288.4	288.5	288.6	288.7	288.7
122.5°	307.9	308.1	308.3	308.5	308.8	309.0	309.3	309.6	309.9	310.3	310.2
125°	338.2	338.9	339.6	340.4	341.1	341.5	341.6	341.8	341.9	342.0	341.8
127.5°	370.5	370.9	371.3	371.6	372.1	372.4	372.5	372.7	372.8	373.0	372.9
130°	389.8	390.4	391.1	391.6	392.2	392.7	392.9	393.1	393.3	393.6	393.5
132.5°	409.2	410.2	411.1	412.1	413.1	413.6	413.5	413.5	413.4	413.4	413.3
135°	439.8	440.5	441.3	442.0	442.7	443.1	443.3	443.4	443.5	443.6	443.6
137.5°	468.6	469.4	470.0	470.7	471.5	471.9	472.2	472.4	472.7	473.0	473.1
140°	487.1	487.8	488.3	488.9	489.6	490.0	490.4	490.8	491.1	491.4	491.7
142.5°	505.7	506.1	506.6	507.2	507.7	508.1	508.6	509.1	509.5	509.9	510.1
145°	532.8	533.3	533.9	534.3	534.8	535.2	535.6	535.9	536.3	536.6	536.6
147.5°	558.0	558.3	558.6	558.8	559.1	559.3	559.6	560.0	560.2	560.5	560.8
150°	574.8	574.7	574.6	574.5	574.3	574.5	575.0	575.4	575.9	576.4	576.4
152.5°	588.5	588.7	588.9	589.1	589.2	589.4	589.6	589.7	589.9	590.2	590.5
155°	609.7	609.7	609.7	609.7	609.7	609.8	609.9	610.0	610.2	610.3	610.8
157.5°	628.7	628.4	628.1	627.9	627.6	627.5	627.6	627.8	627.9	628.0	628.5
160°	639.9	639.5	639.1	638.8	638.4	638.3	638.4	638.6	638.7	638.8	639.2
162.5°	649.8	649.5	649.2	648.9	648.7	648.6	648.6	648.7	648.7	648.7	649.2
165°	663.0	662.7	662.5	662.2	662.0	661.9	662.0	662.2	662.3	662.4	662.9
167.5°	674.2	673.7	673.2	672.7	672.2	672.0	672.0	672.0	672.0	672.0	672.7
170°	680.1	679.7	679.2	678.7	678.3	678.1	678.1	678.1	678.1	678.1	678.7
172.5°	684.5	684.0	683.5	683.1	682.6	682.3	682.3	682.3	682.3	682.3	683.1
175°	689.3	688.8	688.3	687.9	687.4	687.2	687.2	687.2	687.2	687.2	687.9
177.5°	691.8	691.4	691.1	690.7	690.2	690.0	689.9	689.8	689.8	689.7	690.2
180°	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0



TEST NUMBER: P333176-830

CATALOG NUMBER: S125DIP-S610D590U830-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	905.2	905.2	905.2	905.2	905.2	905.2	905.2	905.2
2.5°	902.6	903.9	905.1	905.7	905.6	905.4	905.3	905.2
5°	898.1	899.5	900.9	901.5	901.4	901.3	901.1	900.9
7.5°	888.9	890.3	891.7	892.4	892.2	892.0	891.9	891.7
10°	881.3	882.5	883.8	884.4	884.2	884.0	883.8	883.7
12.5°	871.0	872.0	873.0	873.5	873.5	873.5	873.5	873.4
15°	853.1	853.8	854.7	855.1	855.1	855.1	855.1	855.1
17.5°	832.3	833.2	834.2	834.3	833.5	832.7	832.0	831.1
20°	816.4	817.6	818.7	818.9	818.0	817.3	816.4	815.7
22.5°	798.5	799.3	800.0	800.1	799.6	799.0	798.4	798.0
25°	769.8	770.1	770.4	770.3	769.9	769.4	768.9	768.5
27.5°	739.6	739.7	739.7	739.5	739.0	738.6	738.1	737.6
30°	717.7	717.4	717.0	716.6	716.1	715.7	715.2	714.7
32.5°	695.4	694.7	694.2	693.5	692.7	691.8	690.9	690.0
35°	660.8	660.1	659.2	658.2	657.0	655.6	654.4	653.1
37.5°	624.5	623.4	622.2	621.2	620.5	619.8	619.1	618.3
40°	599.4	597.9	596.5	595.6	595.1	594.7	594.2	593.7
42.5°	574.5	573.2	571.8	570.8	570.0	569.4	568.6	567.9
45°	537.5	535.6	533.8	532.5	532.1	531.6	531.1	530.7
47.5°	498.7	496.7	494.8	493.3	492.2	491.1	489.9	488.8
50°	472.1	470.0	468.0	466.4	465.2	464.1	463.0	461.9
52.5°	446.2	444.4	442.6	441.1	439.9	438.6	437.3	436.1
55°	406.0	404.6	403.2	401.9	400.8	399.6	398.6	397.5
57.5°	366.1	364.3	362.4	361.2	360.6	360.0	359.4	358.8
60°	339.1	337.5	335.9	334.6	333.5	332.3	331.2	330.2
62.5°	313.1	311.4	309.6	308.4	307.6	306.6	305.8	304.9
65°	272.1	270.7	269.3	268.2	267.6	266.9	266.4	265.7
67.5°	233.1	231.9	230.6	229.8	229.4	229.0	228.7	228.3
70°	207.2	206.2	205.3	204.5	203.9	203.2	202.6	202.0
72.5°	182.9	181.8	180.7	179.8	179.2	178.6	178.0	177.3
75°	145.2	144.7	144.2	143.6	143.0	142.3	141.8	141.1
77.5°	110.6	110.3	110.0	109.6	109.1	108.8	108.3	107.8
80°	88.5	88.3	88.1	87.9	87.6	87.3	87.0	86.6
82.5°	67.6	67.3	67.0	66.8	66.8	66.7	66.6	66.6
85°	39.8	39.6	39.5	39.2	38.9	38.5	38.3	38.0
87.5°	16.9	17.0	17.1	17.1	16.9	16.7	16.5	16.3
90°	9.8	10.4	11.0	11.5	11.9	12.2	12.5	12.9
92.5°	22.2	23.0	23.8	24.3	24.6	24.9	25.1	25.4
95°	43.1	43.9	44.8	45.2	45.5	45.8	46.0	46.3
97.5°	67.5	68.3	69.1	69.6	69.7	69.8	69.9	70.1
100°	84.5	85.5	86.5	87.2	87.5	87.8	87.9	88.2
102.5°	101.8	103.0	104.2	104.9	105.3	105.6	105.9	106.2
105°	130.0	130.6	131.4	132.0	132.2	132.6	133.0	133.4
107.5°	160.3	160.7	161.0	161.2	161.2	161.2	161.1	161.1
110°	181.3	181.7	182.1	182.2	182.1	182.0	181.8	181.7



TEST NUMBER: P333176-830

CATALOG NUMBER: S125DIP-S610D590U830-4F0-1E-UDD-F1

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	202.6	202.6	202.8	202.8	202.6	202.4	202.2	202.0
115°	234.7	234.6	234.5	234.4	234.2	234.1	234.0	233.9
117.5°	267.0	267.1	267.2	267.0	266.6	266.1	265.6	265.0
120°	288.7	288.7	288.7	288.5	288.0	287.6	287.1	286.6
122.5°	310.1	310.0	309.9	309.6	309.2	308.9	308.5	308.1
125°	341.5	341.3	341.0	340.8	340.7	340.6	340.4	340.4
127.5°	372.7	372.6	372.5	372.3	372.0	371.8	371.6	371.4
130°	393.3	393.2	393.1	392.9	392.7	392.5	392.2	392.0
132.5°	413.1	413.0	412.9	412.6	412.4	412.0	411.7	411.3
135°	443.6	443.6	443.6	443.4	442.9	442.4	442.0	441.5
137.5°	473.3	473.3	473.5	473.3	472.7	472.1	471.6	470.9
140°	491.9	492.2	492.4	492.2	491.6	491.1	490.4	489.8
142.5°	510.2	510.4	510.5	510.3	509.7	509.1	508.5	507.9
145°	536.6	536.6	536.6	536.4	536.1	535.7	535.4	535.0
147.5°	561.1	561.4	561.7	561.4	560.5	559.8	558.9	558.2
150°	576.4	576.4	576.4	576.3	576.1	575.8	575.6	575.3
152.5°	590.8	591.1	591.4	591.3	590.8	590.4	589.9	589.6
155°	611.2	611.7	612.2	612.2	611.5	611.0	610.3	609.7
157.5°	629.0	629.4	629.9	629.8	629.0	628.2	627.5	626.6
160°	639.7	640.2	640.6	640.6	640.1	639.4	638.9	638.3
162.5°	649.8	650.4	651.0	650.9	650.3	649.5	648.8	648.1
165°	663.4	663.8	664.4	664.2	663.5	662.8	662.0	661.4
167.5°	673.4	674.2	674.9	674.9	674.1	673.4	672.6	671.9
170°	679.5	680.1	680.9	680.8	680.0	679.2	678.3	677.5
172.5°	683.8	684.5	685.2	685.2	684.5	683.7	683.0	682.2
175°	688.6	689.3	690.0	689.9	689.2	688.3	687.5	686.6
177.5°	690.8	691.4	691.9	691.9	691.3	690.6	689.8	689.2
180°	691.0	691.0	691.0	691.0	691.0	691.0	691.0	691.0

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