

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: P333136-830

Luminaire Tested: **S125DIP-S375D810U830-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333136-830
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-S375D810U830-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 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: 4431.8 lumens
Efficiency: N/A
Efficacy: 142.0 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: Semi-Indirect

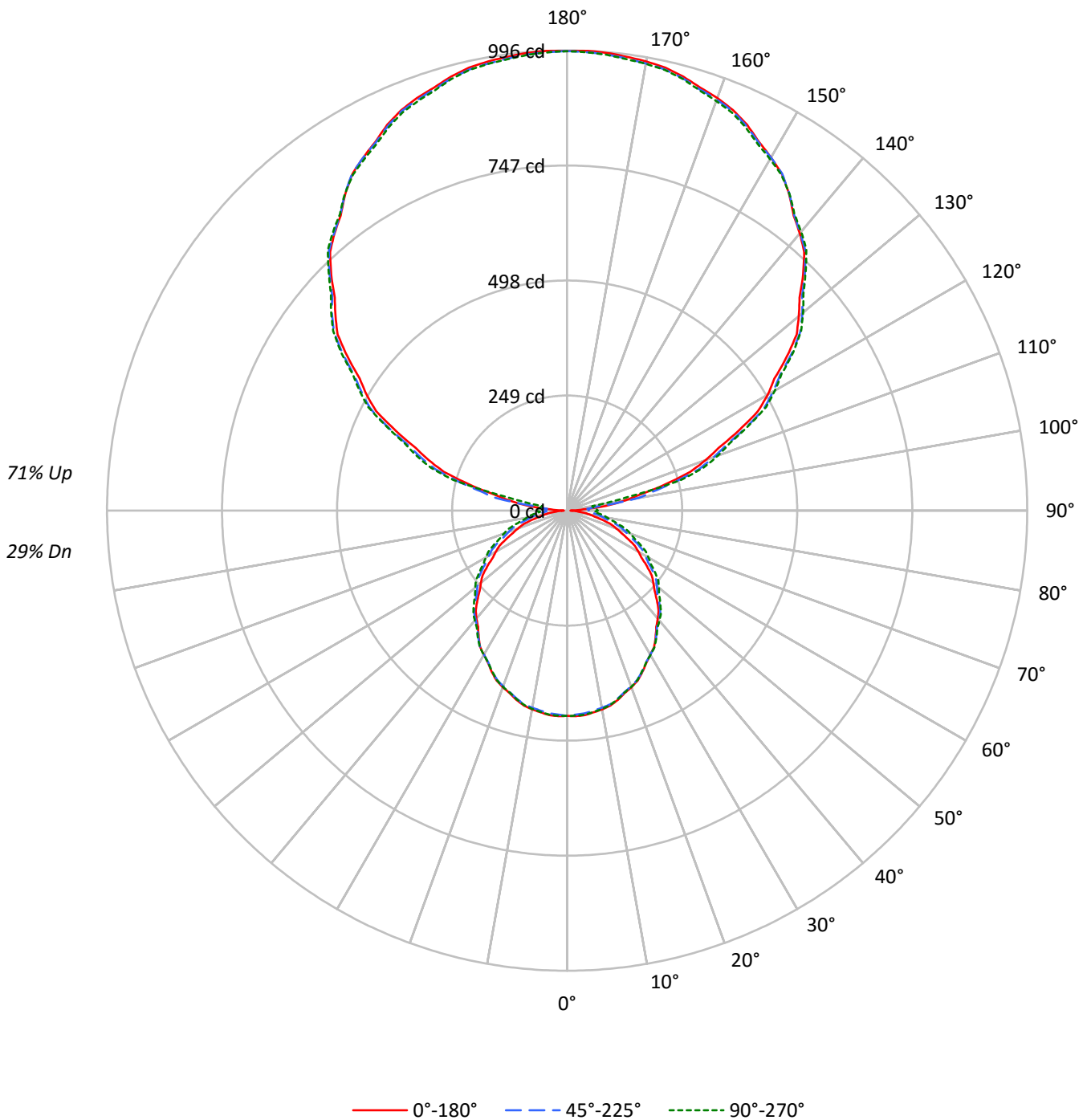
Input Watts (W): 31.2
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333136-830

CATALOG NUMBER: S125DIP-S375D810U830-4F0-1E-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	102	102	102	102	92	92	92	92	72	72	72	54	54	54	37	37	37	29
1	93	88	84	81	83	79	76	73	62	60	58	46	45	44	32	31	30	24
2	84	77	71	66	75	69	64	59	54	51	47	40	38	36	28	26	25	19
3	77	67	60	54	68	60	54	49	48	43	40	36	33	30	25	23	21	16
4	70	59	52	46	62	53	47	42	42	37	34	32	28	26	22	20	18	14
5	64	53	45	39	57	47	41	35	37	33	29	28	25	22	20	17	16	12
6	59	47	39	33	52	42	36	31	34	29	25	25	22	19	18	15	14	10
7	54	42	35	29	48	38	31	27	30	25	22	23	20	17	16	14	12	9
8	50	38	31	26	45	35	28	23	28	23	19	21	17	15	15	13	11	8
9	47	35	28	23	42	31	25	21	25	20	17	19	16	13	14	11	10	7
10	44	32	25	20	39	29	23	18	23	18	15	18	14	12	13	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2869	2869	2869
5°	2875	2817	2826
10°	2855	2766	2762
15°	2821	2706	2681
20°	2776	2631	2601
25°	2721	2552	2502
30°	2654	2464	2411
35°	2593	2384	2329
40°	2531	2299	2245
45°	2459	2226	2171
50°	2391	2147	2106
55°	2309	2073	2030
60°	2220	1989	1951
65°	2128	1900	1864
70°	2024	1779	1773
75°	1855	1662	1662
80°	1636	1521	1540
85°	1430	1424	1502



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	42.0	0.9
10°-20°	119.3	2.7
20°-30°	177.4	4.0
30°-40°	210.1	4.7
40°-50°	217.2	4.9
50°-60°	200.1	4.5
60°-70°	161.8	3.6
70°-80°	108.3	2.4
80°-90°	58.2	1.3
90°-100°	67.7	1.5
100°-110°	245.9	5.5
110°-120°	419.5	9.5
120°-130°	527.2	11.9
130°-140°	561.4	12.7
140°-150°	524.1	11.8
150°-160°	423.3	9.6
160°-170°	273.8	6.2
170°-180°	94.4	2.1
0°-30°	338.7	7.6
0°-40°	548.8	12.4
0°-60°	966.1	21.8
0°-90°	1294.4	29.2
90°-120°	733.1	16.5
90°-150°	2345.8	52.9
90°-180°	3137.0	70.8
0°-180°	4431.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	444	444	444	444	444	
5°	444	443	440	444	444	42
15°	424	424	422	424	422	119
25°	386	387	384	386	384	177
35°	334	336	336	337	337	209
45°	275	280	282	285	285	212
55°	211	218	225	230	232	189
65°	146	156	166	172	174	144
75°	80	92	105	114	116	85
85°	24	38	54	63	67	26
90°	8	28	48	61	66	6
95°	48	56	44	56	60	58
105°	221	231	244	252	255	234
115°	410	416	428	433	431	406
125°	580	585	594	598	598	518
135°	722	726	728	732	730	557
145°	837	838	838	841	838	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: P333136-830

CATALOG NUMBER: S125DIP-S375D810U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3
2.5°	445.4	445.2	445.1	444.9	444.8	444.4	443.8	443.3	442.8	442.2	442.8
5°	444.3	444.1	443.9	443.7	443.6	443.1	442.4	441.8	441.1	440.4	441.2
7.5°	440.4	440.4	440.3	440.2	440.1	439.7	439.0	438.3	437.6	436.9	437.6
10°	436.9	436.9	436.9	436.9	436.9	436.5	435.7	435.0	434.2	433.4	434.1
12.5°	432.1	432.2	432.2	432.3	432.3	432.1	431.5	430.8	430.2	429.6	430.1
15°	424.2	424.3	424.4	424.6	424.7	424.3	423.7	423.0	422.4	421.7	422.3
17.5°	414.2	414.3	414.5	414.7	414.9	414.7	414.1	413.3	412.6	412.0	412.5
20°	406.9	407.1	407.3	407.5	407.6	407.4	406.7	406.0	405.4	404.6	405.0
22.5°	398.5	398.9	399.2	399.5	399.9	399.6	398.9	398.1	397.4	396.6	397.0
25°	385.5	385.8	386.1	386.3	386.6	386.5	386.0	385.4	384.7	384.2	384.6
27.5°	371.1	371.5	371.9	372.3	372.8	372.7	372.0	371.4	370.7	370.0	370.2
30°	360.2	360.8	361.4	362.0	362.6	362.6	362.0	361.4	360.8	360.2	360.4
32.5°	350.5	351.0	351.5	352.0	352.5	352.5	352.1	351.7	351.3	350.8	351.0
35°	333.7	334.3	335.1	335.7	336.4	336.6	336.3	336.0	335.7	335.5	335.7
37.5°	316.9	317.4	318.1	318.7	319.3	319.6	319.5	319.4	319.3	319.2	319.6
40°	305.4	306.1	306.9	307.6	308.5	308.8	308.7	308.6	308.5	308.4	308.8
42.5°	292.8	293.8	294.8	295.9	296.8	297.5	297.7	297.8	298.1	298.3	298.8
45°	274.8	276.0	277.0	278.1	279.1	279.9	280.4	280.9	281.3	281.8	282.5
47.5°	256.5	257.5	258.4	259.5	260.4	261.4	262.2	263.0	263.8	264.7	265.7
50°	243.9	245.0	246.1	247.1	248.2	249.3	250.3	251.4	252.4	253.5	254.6
52.5°	230.7	232.0	233.3	234.6	235.9	237.1	238.5	239.8	241.1	242.3	243.6
55°	211.2	212.8	214.3	215.9	217.4	219.0	220.6	222.1	223.7	225.2	226.3
57.5°	191.4	193.2	195.1	197.0	198.9	200.7	202.5	204.2	206.0	207.7	209.0
60°	178.1	180.1	182.0	184.0	185.9	187.8	189.7	191.7	193.7	195.6	197.0
62.5°	165.2	167.2	169.2	171.1	173.1	175.0	177.1	179.2	181.3	183.4	185.0
65°	145.5	147.7	150.0	152.1	154.4	156.7	159.0	161.4	163.6	166.0	167.4
67.5°	126.9	129.0	131.1	133.3	135.4	137.7	140.1	142.4	144.8	147.1	148.9
70°	113.3	115.5	117.7	119.9	122.2	124.5	127.1	129.6	132.1	134.6	136.5
72.5°	100.0	102.4	104.6	106.9	109.2	111.8	114.5	117.3	120.0	122.7	124.8
75°	80.1	82.7	85.2	87.7	90.2	93.0	96.1	99.2	102.4	105.4	107.4
77.5°	61.1	64.0	66.9	69.7	72.7	75.6	78.6	81.6	84.5	87.6	89.7
80°	49.2	52.1	55.0	58.0	60.8	63.9	67.2	70.5	73.8	77.1	79.3
82.5°	38.5	41.5	44.6	47.6	50.6	53.9	57.2	60.6	64.0	67.3	69.4
85°	23.9	27.1	30.3	33.6	36.8	40.1	43.5	46.8	50.2	53.5	55.7
87.5°	13.8	17.1	20.5	23.8	27.1	30.6	34.1	37.7	41.2	44.7	47.1
90°	7.7	12.2	16.5	20.9	25.4	29.8	34.2	38.6	43.1	47.5	50.5
92.5°	17.6	19.6	21.5	23.5	25.4	28.6	33.0	37.3	41.8	46.1	49.1
95°	47.7	49.7	51.7	53.7	55.8	55.3	52.4	49.5	46.6	43.6	46.6
97.5°	92.8	96.0	99.2	102.3	105.5	102.5	93.3	84.2	75.0	65.9	63.3
100°	127.9	130.4	132.9	135.4	138.0	141.1	144.9	148.6	152.4	156.2	133.7
102.5°	163.5	166.0	168.5	171.0	173.5	176.4	179.8	183.3	186.7	190.1	187.5
105°	220.6	222.8	225.1	227.2	229.4	232.0	234.9	237.8	240.7	243.6	245.5
107.5°	279.9	281.3	282.6	283.9	285.2	287.5	290.6	293.7	296.8	299.9	301.9
110°	318.6	319.7	320.8	322.0	323.2	325.3	328.3	331.4	334.4	337.4	338.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	355.1	356.4	357.7	359.0	360.4	362.5	365.3	368.2	371.0	373.8	374.9
115°	409.5	410.9	412.5	414.0	415.5	417.5	420.3	422.9	425.7	428.3	429.4
117.5°	465.8	466.3	466.7	467.0	467.5	469.2	472.2	475.2	478.2	481.2	482.0
120°	501.2	501.3	501.4	501.6	501.7	503.1	505.9	508.6	511.3	514.0	515.3
122.5°	532.1	532.8	533.7	534.4	535.2	536.7	539.0	541.5	543.8	546.2	547.4
125°	580.4	581.5	582.5	583.5	584.6	586.1	588.0	589.9	591.9	593.8	594.7
127.5°	626.0	626.8	627.5	628.2	629.0	630.1	631.6	633.0	634.5	636.0	637.1
130°	654.4	655.1	655.8	656.6	657.2	658.4	659.9	661.5	663.0	664.5	665.3
132.5°	682.3	683.2	684.2	685.1	686.1	686.8	687.6	688.2	688.9	689.7	690.9
135°	722.5	723.4	724.2	725.2	726.0	726.7	727.0	727.4	727.7	728.0	729.0
137.5°	759.4	760.2	761.0	761.8	762.5	762.9	763.0	763.0	763.0	763.1	764.3
140°	783.3	783.5	783.9	784.2	784.6	784.7	784.7	784.6	784.5	784.4	785.8
142.5°	805.0	805.2	805.3	805.4	805.5	805.7	806.0	806.3	806.4	806.7	807.7
145°	837.1	837.3	837.5	837.7	838.0	838.1	838.1	838.1	838.1	838.1	838.8
147.5°	864.6	864.6	864.5	864.4	864.4	864.4	864.6	864.8	865.1	865.3	865.5
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°	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3
2.5°	443.3	443.8	444.4	444.6	444.5	444.5	444.4	444.3
5°	442.0	442.7	443.5	443.8	443.7	443.7	443.6	443.5
7.5°	438.3	438.9	439.6	439.9	439.8	439.7	439.6	439.5
10°	434.8	435.5	436.1	436.4	436.3	436.2	436.1	436.0
12.5°	430.6	431.1	431.7	431.8	431.6	431.3	431.0	430.8
15°	422.8	423.4	424.0	424.0	423.7	423.3	422.9	422.5
17.5°	412.9	413.3	413.8	413.9	413.7	413.4	413.2	412.9
20°	405.3	405.6	405.9	406.0	406.0	406.0	406.0	406.0
22.5°	397.4	397.8	398.1	398.2	397.9	397.8	397.5	397.3
25°	384.9	385.4	385.8	385.7	385.2	384.7	384.3	383.8
27.5°	370.5	370.8	371.1	371.2	371.0	370.8	370.6	370.4
30°	360.6	360.8	361.0	361.1	361.0	360.9	360.8	360.7
32.5°	351.2	351.4	351.6	351.7	351.6	351.5	351.4	351.3
35°	336.0	336.3	336.6	336.7	336.7	336.7	336.7	336.7
37.5°	320.0	320.4	320.7	320.9	320.9	320.8	320.8	320.7
40°	309.2	309.5	310.0	310.3	310.5	310.7	310.9	311.0
42.5°	299.3	299.7	300.2	300.4	300.5	300.5	300.5	300.6
45°	283.2	283.9	284.6	284.9	285.0	285.1	285.2	285.3
47.5°	266.6	267.7	268.6	269.2	269.5	269.7	269.8	270.0
50°	255.6	256.7	257.8	258.4	258.7	259.0	259.3	259.6
52.5°	244.7	245.8	246.9	247.6	247.8	248.1	248.3	248.5
55°	227.3	228.4	229.5	230.2	230.5	230.9	231.4	231.8
57.5°	210.2	211.4	212.6	213.4	213.7	214.0	214.3	214.6
60°	198.5	199.9	201.4	202.3	202.6	202.8	203.1	203.4
62.5°	186.6	188.2	189.8	190.8	191.1	191.5	191.9	192.3
65°	168.9	170.3	171.7	172.7	173.1	173.4	173.9	174.3
67.5°	150.7	152.4	154.2	155.3	155.8	156.4	156.8	157.3
70°	138.3	140.2	141.9	143.2	143.7	144.3	144.9	145.5
72.5°	126.8	128.8	130.7	132.0	132.3	132.8	133.2	133.7
75°	109.3	111.2	113.2	114.3	114.9	115.4	115.8	116.3
77.5°	91.8	94.0	96.0	97.4	97.7	98.1	98.5	98.9
80°	81.3	83.5	85.6	86.9	87.3	87.7	88.0	88.4
82.5°	71.4	73.5	75.6	76.9	77.7	78.3	79.0	79.7
85°	57.9	59.9	62.1	63.5	64.3	65.1	65.9	66.6
87.5°	49.5	51.8	54.3	55.8	56.6	57.4	58.2	58.9
90°	53.6	56.6	59.7	61.8	63.0	64.2	65.3	66.4
92.5°	52.0	55.0	58.0	59.9	60.8	61.7	62.7	63.5
95°	49.5	52.4	55.4	57.2	57.9	58.5	59.2	59.9
97.5°	60.7	58.2	55.5	54.6	55.2	55.9	56.6	57.2
100°	111.4	89.0	66.6	55.4	55.3	55.2	55.2	55.1
102.5°	184.8	182.1	179.5	172.9	162.3	151.7	141.2	130.6
105°	247.5	249.4	251.4	252.6	253.1	253.6	254.1	254.7
107.5°	303.8	305.8	307.7	308.8	308.9	309.0	309.1	309.2
110°	340.2	341.5	342.8	343.9	344.8	345.6	346.5	347.3



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CATALOG NUMBER: S125DIP-S375D810U830-4F0-1E-UDD-D

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	376.1	377.2	378.3	379.1	379.6	380.0	380.5	380.9
115°	430.5	431.6	432.6	433.0	432.6	432.2	431.8	431.4
117.5°	482.8	483.6	484.4	484.8	485.1	485.3	485.6	485.8
120°	516.6	517.9	519.2	519.8	519.5	519.3	519.1	518.9
122.5°	548.7	550.0	551.2	551.6	551.3	550.9	550.5	550.2
125°	595.6	596.5	597.4	597.9	597.9	597.9	597.8	597.8
127.5°	638.2	639.2	640.4	640.6	639.9	639.2	638.6	637.9
130°	666.2	667.0	667.9	668.2	667.9	667.5	667.2	666.8
132.5°	692.1	693.4	694.7	695.0	694.7	694.3	693.8	693.4
135°	729.9	730.8	731.8	732.0	731.5	731.0	730.5	730.0
137.5°	765.4	766.7	767.9	768.3	767.8	767.3	766.9	766.4
140°	787.2	788.6	789.9	790.4	789.8	789.2	788.6	788.0
142.5°	808.7	809.6	810.6	810.8	810.2	809.6	809.0	808.4
145°	839.4	840.0	840.7	840.7	840.1	839.5	839.0	838.3
147.5°	865.9	866.3	866.7	866.3	865.3	864.3	863.3	862.2
150°	883.0	883.4	883.6	883.2	881.9	880.8	879.6	878.4
152.5°	898.3	898.6	899.0	898.5	897.4	896.3	895.0	893.9
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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