

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: P333147

Luminaire Tested: **S125DIP-S375D1035U835-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333147
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S375D1035U835-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5176.0 lumens
Efficiency: N/A
Efficacy: 138.8 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

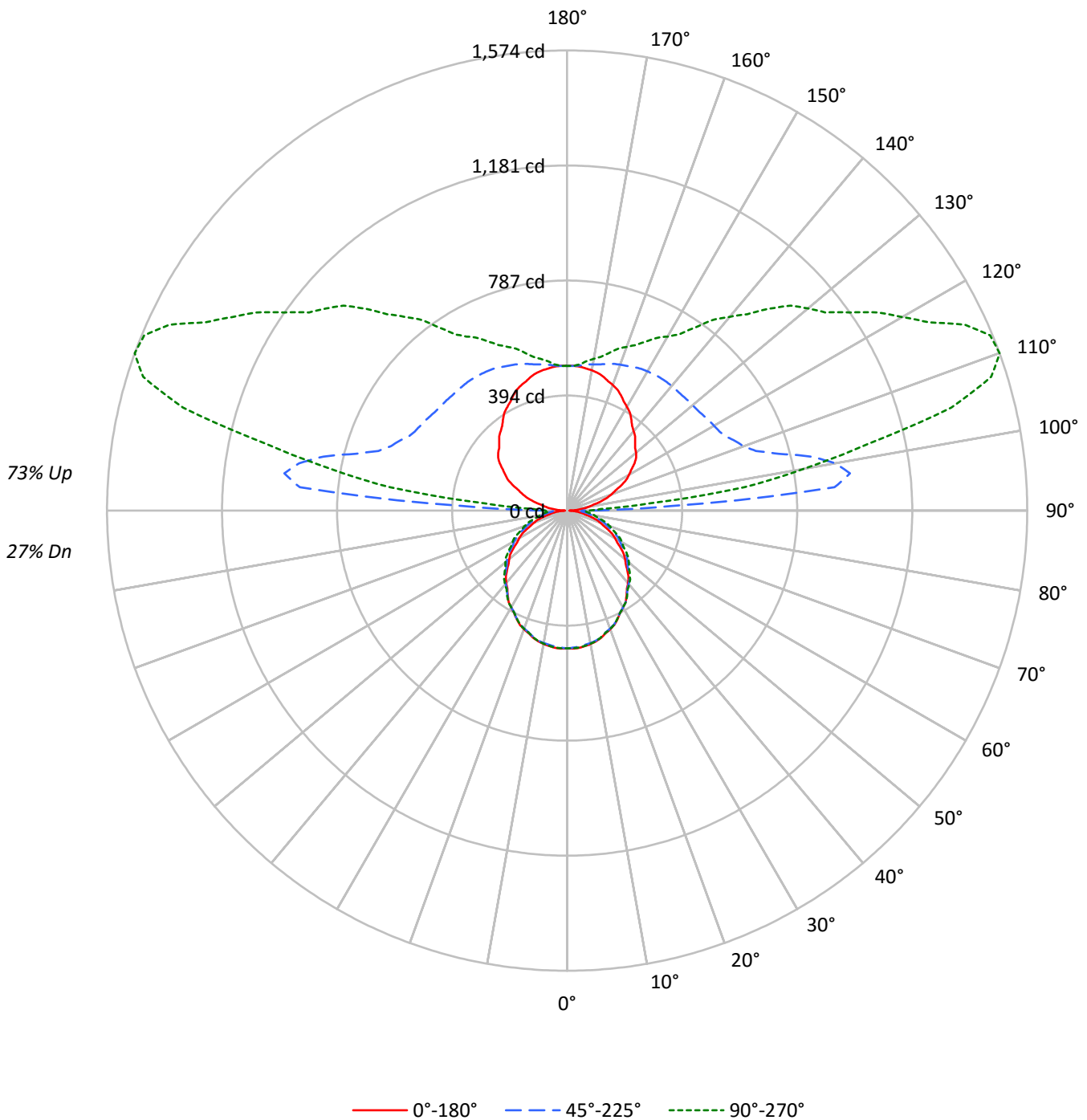
Input Watts (W): 37.3
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	102	102	102	102	91	91	91	91	70	70	70	52	52	52	35	35	35	27
1	92	88	84	80	82	78	75	72	61	59	57	45	43	42	30	29	28	22
2	84	76	70	65	74	68	63	59	53	50	47	39	37	35	26	25	24	18
3	76	67	60	54	68	60	54	49	47	42	39	34	32	29	23	21	20	15
4	70	59	51	45	62	53	46	41	41	37	33	30	27	25	20	19	17	13
5	64	52	44	39	56	47	40	35	37	32	28	27	24	21	18	16	15	11
6	58	47	39	33	52	42	35	30	33	28	24	24	21	19	17	14	13	10
7	54	42	34	29	48	38	31	26	30	25	21	22	19	16	15	13	11	8
8	50	38	30	25	44	34	28	23	27	22	19	20	17	14	14	12	10	7
9	46	35	27	22	41	31	25	20	25	20	17	18	15	13	13	11	9	7
10	43	32	25	20	38	28	22	18	23	18	15	17	14	11	12	10	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3044	3044	3044
5°	3051	2988	2998
10°	3028	2935	2930
15°	2993	2871	2845
20°	2945	2792	2759
25°	2886	2707	2654
30°	2816	2615	2559
35°	2751	2529	2470
40°	2685	2439	2382
45°	2609	2362	2304
50°	2537	2279	2234
55°	2450	2199	2154
60°	2356	2110	2070
65°	2259	2016	1977
70°	2147	1887	1882
75°	1968	1763	1763
80°	1736	1613	1635
85°	1520	1511	1594



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	44.6	0.9
10°-20°	126.5	2.4
20°-30°	188.2	3.6
30°-40°	222.9	4.3
40°-50°	230.5	4.5
50°-60°	212.3	4.1
60°-70°	171.6	3.3
70°-80°	114.9	2.2
80°-90°	62.4	1.2
90°-100°	392.3	7.6
100°-110°	796.2	15.4
110°-120°	740.6	14.3
120°-130°	596.2	11.5
130°-140°	475.0	9.2
140°-150°	356.2	6.9
150°-160°	250.1	4.8
160°-170°	147.4	2.8
170°-180°	48.0	0.9
0°-30°	359.3	6.9
0°-40°	582.2	11.2
0°-60°	1025.0	19.8
0°-90°	1373.9	26.5
90°-120°	1929.1	37.3
90°-150°	3356.5	64.8
90°-180°	3802.0	73.5
0°-180°	5176.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	471	471	471	471	471	
5°	471	470	467	471	470	45
15°	450	450	447	450	448	127
25°	409	410	408	409	407	188
35°	354	357	356	357	357	221
45°	292	297	299	302	303	225
55°	224	232	239	244	246	200
65°	154	165	176	183	185	153
75°	85	97	112	121	123	90
85°	25	41	57	67	71	27
90°	8	31	54	69	75	7
95°	39	116	918	445	282	40
105°	117	170	749	1459	1361	123
115°	204	250	599	1278	1503	201
125°	281	329	568	1014	1181	250
135°	328	394	557	845	976	255
145°	382	437	555	694	765	239
155°	435	468	541	611	638	200
165°	475	488	519	551	559	134
175°	494	494	498	504	502	47
180°	495	495	495	495	495	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4
2.5°	472.5	472.3	472.2	472.0	471.9	471.5	470.9	470.3	469.8	469.2	469.8
5°	471.4	471.2	471.0	470.8	470.6	470.1	469.4	468.7	468.0	467.2	468.1
7.5°	467.2	467.2	467.1	467.0	466.9	466.5	465.8	465.0	464.3	463.5	464.3
10°	463.5	463.5	463.5	463.5	463.5	463.1	462.3	461.5	460.7	459.8	460.6
12.5°	458.4	458.5	458.5	458.6	458.7	458.4	457.8	457.1	456.4	455.8	456.3
15°	450.1	450.2	450.3	450.5	450.6	450.2	449.5	448.8	448.1	447.4	448.0
17.5°	439.4	439.6	439.8	440.0	440.2	440.0	439.3	438.5	437.8	437.1	437.6
20°	431.7	431.9	432.1	432.3	432.5	432.2	431.5	430.8	430.1	429.3	429.7
22.5°	422.8	423.2	423.5	423.9	424.3	424.0	423.2	422.4	421.6	420.8	421.2
25°	409.0	409.3	409.6	409.9	410.2	410.1	409.5	408.9	408.2	407.6	408.0
27.5°	393.7	394.1	394.6	395.0	395.5	395.4	394.7	394.0	393.3	392.6	392.8
30°	382.2	382.8	383.4	384.1	384.7	384.7	384.1	383.4	382.8	382.2	382.4
32.5°	371.9	372.4	372.9	373.5	374.0	374.0	373.6	373.1	372.7	372.2	372.4
35°	354.0	354.7	355.5	356.2	356.9	357.1	356.8	356.5	356.2	355.9	356.2
37.5°	336.2	336.8	337.5	338.1	338.8	339.1	339.0	338.9	338.8	338.7	339.1
40°	324.0	324.8	325.6	326.4	327.3	327.6	327.5	327.4	327.3	327.2	327.6
42.5°	310.7	311.7	312.8	313.9	314.9	315.6	315.8	316.0	316.3	316.5	317.0
45°	291.6	292.8	293.9	295.0	296.1	297.0	297.5	298.0	298.5	299.0	299.7
47.5°	272.1	273.2	274.2	275.3	276.3	277.3	278.2	279.0	279.9	280.8	281.9
50°	258.8	259.9	261.1	262.2	263.3	264.5	265.6	266.7	267.8	269.0	270.1
52.5°	244.8	246.1	247.5	248.9	250.3	251.6	253.0	254.4	255.8	257.1	258.4
55°	224.1	225.8	227.4	229.1	230.7	232.4	234.0	235.6	237.3	238.9	240.1
57.5°	203.1	205.0	207.0	209.0	211.0	212.9	214.8	216.7	218.6	220.4	221.7
60°	189.0	191.1	193.1	195.2	197.2	199.3	201.3	203.4	205.5	207.5	209.0
62.5°	175.3	177.4	179.5	181.5	183.6	185.7	187.9	190.1	192.4	194.6	196.3
65°	154.4	156.7	159.1	161.4	163.8	166.2	168.7	171.2	173.6	176.1	177.6
67.5°	134.6	136.9	139.1	141.4	143.7	146.1	148.6	151.1	153.6	156.1	158.0
70°	120.2	122.5	124.9	127.2	129.6	132.1	134.8	137.5	140.1	142.8	144.8
72.5°	106.1	108.6	111.0	113.4	115.9	118.6	121.5	124.4	127.3	130.2	132.4
75°	85.0	87.7	90.4	93.0	95.7	98.7	102.0	105.3	108.6	111.8	113.9
77.5°	64.8	67.9	71.0	74.0	77.1	80.2	83.4	86.6	89.7	92.9	95.2
80°	52.2	55.3	58.4	61.5	64.5	67.8	71.3	74.8	78.3	81.8	84.1
82.5°	40.8	44.0	47.3	50.5	53.7	57.2	60.7	64.3	67.9	71.4	73.6
85°	25.4	28.8	32.2	35.6	39.0	42.5	46.1	49.7	53.3	56.8	59.1
87.5°	14.6	18.1	21.8	25.5	29.2	33.0	36.6	40.5	44.2	48.1	50.7
90°	8.4	12.7	18.0	23.2	28.5	33.9	38.4	43.9	48.4	53.9	57.2
92.5°	18.8	24.5	35.9	51.3	71.5	104.0	162.1	257.1	359.9	358.3	299.2
95°	39.0	42.6	53.3	66.9	91.6	139.6	249.9	473.0	752.0	918.2	901.5
97.5°	60.2	63.8	71.8	85.1	107.3	142.5	216.6	380.9	672.5	976.0	1128.7
100°	75.0	79.1	85.3	98.4	119.5	152.2	213.4	346.4	601.3	931.0	1182.7
102.5°	91.4	94.6	99.7	113.5	132.9	164.6	219.3	331.6	547.2	853.7	1147.6
105°	117.0	118.6	125.2	136.9	154.5	184.8	231.8	323.7	493.5	749.2	1037.7
107.5°	142.0	145.4	151.5	161.1	179.1	206.4	251.9	330.9	469.9	676.9	926.1
110°	160.0	163.2	168.4	178.6	194.8	222.9	266.7	338.4	462.1	642.6	862.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	178.3	181.3	185.5	195.5	211.4	238.5	280.6	348.3	460.7	622.0	814.3
115°	204.4	207.1	210.9	220.6	236.2	262.9	302.5	363.1	461.6	599.0	761.6
117.5°	227.9	231.4	235.1	244.5	262.0	287.6	325.1	380.3	466.1	586.6	729.1
120°	243.9	247.2	251.5	260.8	278.1	304.4	341.7	391.9	471.2	580.3	710.9
122.5°	260.3	262.6	266.0	275.1	293.8	320.0	357.2	405.0	475.4	574.9	694.9
125°	281.4	283.3	288.1	297.0	315.9	342.8	377.8	422.8	482.8	567.7	673.1
127.5°	297.5	300.4	306.7	317.9	338.0	364.7	398.2	439.4	491.6	563.1	652.9
130°	307.9	310.7	318.6	331.5	352.4	379.0	411.4	450.7	497.1	560.4	639.7
132.5°	315.5	319.2	328.8	343.4	365.1	391.6	423.7	460.3	503.1	559.0	628.7
135°	328.4	332.2	344.1	360.0	380.9	408.1	439.8	473.4	511.1	556.7	615.0
137.5°	344.6	347.5	358.6	374.5	395.0	422.9	451.4	483.3	518.8	556.3	603.0
140°	353.9	356.8	368.8	384.8	403.8	430.8	459.8	489.9	521.9	556.0	597.0
142.5°	365.0	367.1	378.2	394.1	412.2	437.5	464.9	493.3	523.7	556.0	592.1
145°	381.8	383.7	393.6	407.4	425.3	448.2	474.2	499.1	526.1	555.0	585.5
147.5°	398.9	400.1	408.7	421.7	437.2	457.4	480.2	502.7	527.1	552.4	579.0
150°	409.3	411.3	418.3	431.3	445.2	462.2	484.2	505.1	527.1	550.0	574.0
152.5°	420.5	421.7	427.9	439.2	452.4	467.8	488.2	506.7	526.3	546.9	568.4
155°	435.2	435.2	441.2	451.2	461.2	475.2	492.1	508.1	524.1	541.1	559.0
157.5°	448.4	448.2	453.0	461.6	470.4	481.0	495.5	509.1	521.5	535.1	550.2
160°	457.2	456.2	460.2	467.2	475.2	484.2	497.1	509.1	519.1	531.1	543.1
162.5°	464.4	463.4	467.4	473.6	480.0	487.4	498.7	508.3	516.7	526.3	536.7
165°	475.2	473.2	476.2	481.2	485.2	491.2	499.1	507.1	513.1	519.1	527.1
167.5°	482.4	481.4	483.2	486.0	488.8	492.5	499.1	504.7	507.5	512.1	517.7
170°	487.2	486.2	487.2	489.2	491.2	494.1	499.1	503.1	505.1	508.1	512.1
172.5°	490.4	488.6	489.6	491.5	492.7	494.1	498.3	501.5	501.9	503.3	506.5
175°	494.1	492.1	493.1	494.1	494.1	494.1	497.1	499.1	498.1	498.1	499.1
177.5°	495.9	494.3	494.3	495.1	494.3	494.3	495.9	496.7	495.1	495.1	495.9
180°	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	471.4	471.4	471.4	471.4	471.4	471.4	471.4	471.4
2.5°	470.3	470.9	471.5	471.7	471.6	471.6	471.5	471.4
5°	468.9	469.7	470.5	470.9	470.8	470.7	470.6	470.5
7.5°	465.0	465.7	466.4	466.7	466.6	466.5	466.4	466.3
10°	461.3	462.0	462.7	463.0	462.9	462.8	462.7	462.6
12.5°	456.9	457.4	458.0	458.1	457.9	457.6	457.3	457.1
15°	448.6	449.2	449.8	449.9	449.5	449.1	448.7	448.3
17.5°	438.1	438.5	439.0	439.1	438.9	438.6	438.4	438.1
20°	430.0	430.3	430.6	430.7	430.7	430.7	430.7	430.7
22.5°	421.6	422.0	422.4	422.5	422.2	422.0	421.7	421.5
25°	408.4	408.9	409.3	409.2	408.7	408.2	407.7	407.2
27.5°	393.1	393.4	393.7	393.8	393.6	393.4	393.2	393.0
30°	382.6	382.8	383.0	383.1	383.0	382.9	382.8	382.7
32.5°	372.6	372.8	373.0	373.1	373.0	372.9	372.8	372.7
35°	356.5	356.8	357.1	357.2	357.2	357.2	357.2	357.2
37.5°	339.5	339.9	340.3	340.5	340.5	340.4	340.4	340.3
40°	328.0	328.4	328.9	329.2	329.4	329.6	329.8	330.0
42.5°	317.5	318.0	318.5	318.7	318.8	318.8	318.8	318.9
45°	300.5	301.2	301.9	302.3	302.4	302.5	302.6	302.7
47.5°	282.9	284.0	285.0	285.6	285.9	286.1	286.3	286.5
50°	271.2	272.4	273.5	274.2	274.5	274.8	275.1	275.4
52.5°	259.6	260.8	262.0	262.7	262.9	263.2	263.4	263.6
55°	241.2	242.3	243.5	244.2	244.6	245.0	245.5	245.9
57.5°	223.0	224.3	225.6	226.4	226.7	227.0	227.4	227.7
60°	210.6	212.1	213.7	214.6	214.9	215.2	215.5	215.8
62.5°	198.0	199.7	201.4	202.4	202.8	203.2	203.6	204.0
65°	179.2	180.7	182.2	183.2	183.6	184.0	184.5	184.9
67.5°	159.9	161.7	163.6	164.8	165.3	165.9	166.4	166.9
70°	146.7	148.7	150.6	151.9	152.5	153.1	153.7	154.4
72.5°	134.5	136.6	138.7	140.0	140.4	140.9	141.3	141.8
75°	116.0	118.0	120.1	121.3	121.9	122.4	122.9	123.4
77.5°	97.4	99.7	101.9	103.3	103.7	104.1	104.5	104.9
80°	86.3	88.6	90.8	92.2	92.6	93.0	93.4	93.8
82.5°	75.8	78.0	80.2	81.6	82.4	83.1	83.8	84.6
85°	61.4	63.6	65.9	67.4	68.2	69.1	69.9	70.7
87.5°	53.2	55.8	58.4	60.3	61.0	61.7	62.7	63.4
90°	60.6	64.0	67.3	70.8	71.6	72.3	74.0	74.7
92.5°	217.9	171.6	142.2	128.9	116.8	115.2	114.5	113.6
95°	756.0	606.5	486.0	403.6	333.5	304.3	297.0	281.7
97.5°	1104.7	1000.4	883.0	767.8	706.8	651.6	623.4	611.3
100°	1261.8	1215.0	1114.3	1011.9	943.6	872.4	836.1	820.7
102.5°	1313.6	1345.9	1298.6	1229.7	1156.6	1106.1	1066.6	1055.3
105°	1279.4	1418.2	1464.2	1454.6	1423.3	1391.1	1371.9	1360.6
107.5°	1164.5	1349.0	1463.9	1517.3	1534.1	1534.5	1528.6	1521.2
110°	1079.8	1271.4	1414.1	1500.3	1546.0	1565.6	1573.4	1574.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1012.7	1194.6	1338.9	1440.2	1506.6	1539.8	1557.9	1565.8
115°	928.2	1084.7	1223.3	1333.4	1411.9	1460.4	1489.0	1502.6
117.5°	872.6	1007.7	1127.3	1228.3	1306.9	1357.1	1385.6	1394.2
120°	842.4	963.9	1075.5	1164.5	1239.0	1287.5	1315.1	1323.7
122.5°	819.2	931.9	1031.4	1114.8	1181.3	1225.8	1253.4	1261.2
125°	785.6	889.0	977.5	1050.5	1106.9	1148.4	1170.8	1181.3
127.5°	751.3	847.8	930.4	998.7	1050.0	1086.8	1108.1	1113.1
130°	730.0	819.3	898.6	964.5	1014.9	1048.4	1068.8	1075.3
132.5°	708.6	792.3	864.4	927.8	978.2	1011.5	1030.3	1037.6
135°	680.2	750.4	815.6	873.5	917.9	951.4	969.8	976.3
137.5°	656.3	713.2	767.6	816.7	856.4	886.8	903.8	910.8
140°	643.1	691.1	738.2	780.9	818.2	844.6	860.0	865.4
142.5°	631.6	672.3	712.8	749.8	781.6	804.0	818.6	823.2
145°	617.0	648.4	679.9	707.3	731.7	749.0	760.4	764.8
147.5°	603.5	628.8	652.7	673.3	692.4	706.2	712.8	714.7
150°	596.0	617.9	636.9	654.9	670.0	682.1	686.2	687.3
152.5°	588.0	607.5	624.9	638.9	651.5	661.1	665.1	666.1
155°	576.0	592.0	606.0	616.9	626.9	633.9	636.9	637.9
157.5°	564.0	577.2	588.0	596.6	604.4	610.1	612.9	612.7
160°	556.0	566.0	576.0	583.0	590.0	595.0	597.0	596.0
162.5°	547.3	556.4	564.8	571.0	576.4	580.6	581.0	580.8
165°	535.1	542.1	548.1	553.0	557.0	559.0	559.0	559.0
167.5°	523.5	528.1	532.7	536.3	538.3	540.1	539.3	539.1
170°	517.1	520.1	523.1	525.1	527.1	528.1	528.1	527.1
172.5°	509.9	512.9	515.1	516.3	516.7	518.5	516.9	515.9
175°	502.1	502.1	504.1	504.1	504.1	505.1	503.1	502.1
177.5°	496.7	497.5	497.5	497.5	496.7	497.5	495.1	495.1
180°	495.1	495.1	495.1	495.1	495.1	495.1	495.1	495.1

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