

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: P333156-940

Luminaire Tested: **S125DIP-S375D1205U940-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333156-940
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-S375D1205U940-4F0-1E-UDD-D4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5158.8 lumens
Efficiency: N/A
Efficacy: 122.2 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

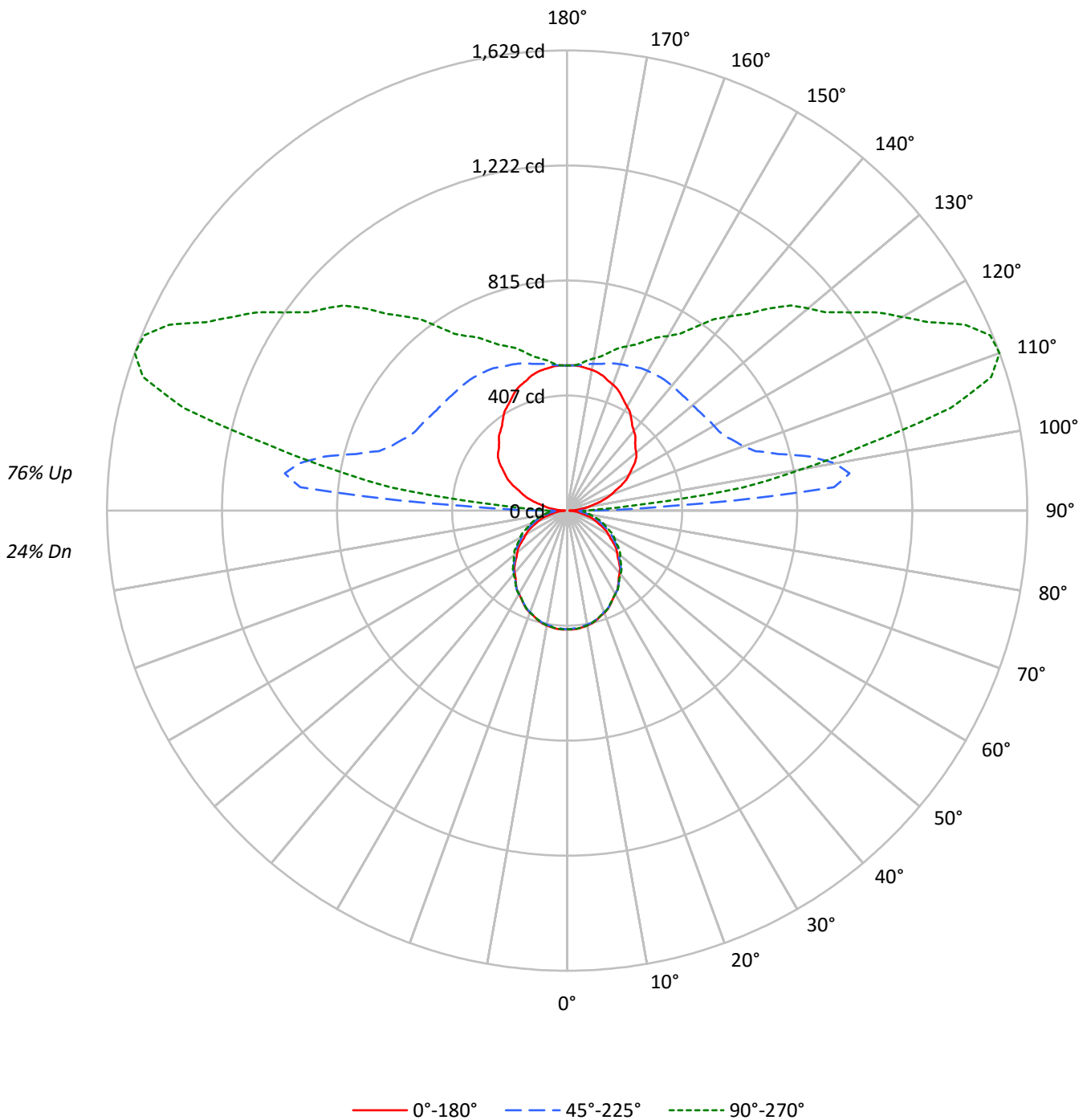
Input Watts (W): 42.2
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	92	87	83	80	81	78	74	71	60	57	55	43	42	40	28	27	26	19
2	83	76	70	65	74	68	63	58	52	48	46	37	35	33	24	23	22	16
3	76	67	59	54	67	59	53	48	46	41	38	33	30	28	21	20	18	13
4	69	59	51	45	61	52	46	41	40	36	32	29	26	24	19	17	16	11
5	63	52	44	38	56	46	40	35	36	31	28	26	23	20	17	15	14	10
6	58	46	39	33	51	42	35	30	32	27	24	23	20	18	15	13	12	9
7	54	42	34	29	47	37	31	26	29	24	21	21	18	16	14	12	10	8
8	50	38	30	25	44	34	27	23	26	22	18	19	16	14	13	11	9	7
9	46	34	27	22	41	31	24	20	24	19	16	18	15	12	12	10	8	6
10	43	31	24	20	38	28	22	18	22	18	14	16	13	11	11	9	8	5

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2715	2715	2715
5°	2721	2664	2673
10°	2700	2617	2613
15°	2669	2561	2537
20°	2626	2489	2461
25°	2574	2414	2367
30°	2511	2331	2282
35°	2453	2256	2203
40°	2394	2175	2125
45°	2326	2106	2054
50°	2263	2032	1993
55°	2185	1961	1921
60°	2101	1881	1846
65°	2014	1797	1764
70°	1915	1682	1678
75°	1755	1572	1572
80°	1547	1438	1457
85°	1353	1346	1421



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	39.7	0.8
10°-20°	112.8	2.2
20°-30°	167.8	3.3
30°-40°	198.8	3.9
40°-50°	205.5	4.0
50°-60°	189.3	3.7
60°-70°	153.0	3.0
70°-80°	102.5	2.0
80°-90°	56.0	1.1
90°-100°	402.3	7.8
100°-110°	822.8	15.9
110°-120°	766.3	14.9
120°-130°	617.4	12.0
130°-140°	492.4	9.5
140°-150°	369.6	7.2
150°-160°	259.6	5.0
160°-170°	153.0	3.0
170°-180°	49.8	1.0
0°-30°	320.4	6.2
0°-40°	519.2	10.1
0°-60°	914.0	17.7
0°-90°	1225.5	23.8
90°-120°	1991.4	38.6
90°-150°	3470.8	67.3
90°-180°	3933.0	76.2
0°-180°	5158.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	420	420	420	420	420	
5°	420	419	417	420	420	40
15°	401	402	399	401	400	113
25°	365	366	364	365	363	168
35°	316	318	317	318	318	197
45°	260	264	267	269	270	201
55°	200	206	213	217	219	179
65°	138	147	157	163	165	137
75°	76	87	100	108	110	80
85°	23	36	51	59	63	24
90°	8	29	50	65	70	6
95°	40	117	948	455	286	41
105°	121	174	774	1510	1407	127
115°	212	258	619	1323	1555	208
125°	292	342	588	1050	1223	259
135°	341	409	577	875	1012	264
145°	396	453	576	720	793	248
155°	452	486	562	635	662	208
165°	493	507	539	571	580	139
175°	513	513	517	523	521	49
180°	514	514	514	514	514	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4
2.5°	421.3	421.2	421.1	420.9	420.8	420.4	419.9	419.4	418.9	418.4	418.9
5°	420.4	420.2	420.0	419.8	419.6	419.2	418.6	417.9	417.3	416.6	417.4
7.5°	416.6	416.6	416.5	416.4	416.3	416.0	415.4	414.6	414.0	413.3	414.0
10°	413.3	413.3	413.3	413.3	413.3	413.0	412.2	411.5	410.8	410.0	410.7
12.5°	408.8	408.8	408.8	408.9	409.0	408.8	408.2	407.6	407.0	406.4	406.9
15°	401.4	401.4	401.5	401.7	401.8	401.4	400.8	400.2	399.6	399.0	399.5
17.5°	391.8	392.0	392.2	392.4	392.5	392.4	391.7	391.0	390.4	389.8	390.2
20°	385.0	385.1	385.3	385.5	385.7	385.4	384.8	384.1	383.5	382.8	383.2
22.5°	377.0	377.4	377.6	378.0	378.4	378.1	377.4	376.7	375.9	375.2	375.6
25°	364.7	365.0	365.2	365.5	365.8	365.7	365.2	364.6	364.0	363.5	363.8
27.5°	351.1	351.4	351.9	352.2	352.7	352.6	352.0	351.3	350.7	350.1	350.3
30°	340.8	341.3	341.9	342.5	343.0	343.0	342.5	341.9	341.3	340.8	341.0
32.5°	331.6	332.1	332.5	333.1	333.5	333.5	333.1	332.7	332.3	331.9	332.1
35°	315.7	316.3	317.0	317.6	318.3	318.4	318.2	317.9	317.6	317.4	317.6
37.5°	299.8	300.3	301.0	301.5	302.1	302.4	302.3	302.2	302.1	302.0	302.4
40°	288.9	289.6	290.3	291.1	291.9	292.1	292.0	291.9	291.9	291.8	292.1
42.5°	277.1	277.9	278.9	279.9	280.8	281.4	281.6	281.8	282.0	282.2	282.7
45°	260.0	261.1	262.1	263.1	264.0	264.8	265.3	265.7	266.2	266.6	267.2
47.5°	242.6	243.6	244.5	245.5	246.4	247.3	248.1	248.8	249.6	250.4	251.4
50°	230.8	231.8	232.8	233.8	234.8	235.9	236.8	237.8	238.8	239.9	240.9
52.5°	218.3	219.5	220.7	221.9	223.2	224.4	225.6	226.9	228.1	229.3	230.4
55°	199.8	201.3	202.8	204.3	205.7	207.2	208.7	210.1	211.6	213.0	214.1
57.5°	181.1	182.8	184.6	186.4	188.2	189.8	191.5	193.2	194.9	196.5	197.7
60°	168.5	170.4	172.2	174.1	175.8	177.7	179.5	181.4	183.2	185.0	186.4
62.5°	156.3	158.2	160.1	161.8	163.7	165.6	167.6	169.5	171.6	173.5	175.0
65°	137.7	139.7	141.9	143.9	146.1	148.2	150.4	152.7	154.8	157.0	158.4
67.5°	120.0	122.1	124.0	126.1	128.1	130.3	132.5	134.7	137.0	139.2	140.9
70°	107.2	109.2	111.4	113.4	115.6	117.8	120.2	122.6	124.9	127.3	129.1
72.5°	94.6	96.8	99.0	101.1	103.3	105.8	108.3	110.9	113.5	116.1	118.1
75°	75.8	78.2	80.6	82.9	85.3	88.0	91.0	93.9	96.8	99.7	101.6
77.5°	57.8	60.5	63.3	66.0	68.8	71.5	74.4	77.2	80.0	82.8	84.9
80°	46.5	49.3	52.1	54.8	57.5	60.5	63.6	66.7	69.8	72.9	75.0
82.5°	36.4	39.2	42.2	45.0	47.9	51.0	54.1	57.3	60.5	63.7	65.6
85°	22.6	25.7	28.7	31.7	34.8	37.9	41.1	44.3	47.5	50.6	52.7
87.5°	13.1	16.2	19.5	22.9	26.2	29.7	33.0	36.6	39.9	43.3	45.7
90°	7.7	11.6	16.6	21.6	26.6	31.7	35.8	41.0	45.2	50.4	53.5
92.5°	18.5	24.0	35.4	50.9	71.5	104.7	164.4	262.5	368.7	366.5	305.0
95°	39.6	43.0	53.7	67.4	92.6	142.0	255.9	487.0	776.1	948.1	930.4
97.5°	61.6	65.0	72.9	86.5	109.1	145.3	221.7	391.7	693.9	1008.4	1166.6
100°	77.0	81.1	87.1	100.4	122.1	155.6	218.6	356.2	620.3	962.0	1223.0
102.5°	94.2	97.2	102.3	116.3	136.1	168.6	225.0	341.0	564.3	881.9	1186.8
105°	120.8	122.3	128.9	140.7	158.8	189.9	238.3	333.2	509.0	773.8	1073.1
107.5°	146.9	150.2	156.3	166.1	184.6	212.6	259.4	341.0	484.7	699.2	957.5
110°	165.6	168.7	174.0	184.4	201.1	229.8	274.8	348.9	476.9	663.9	891.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	184.6	187.6	191.8	202.0	218.4	246.2	289.5	359.4	475.6	642.7	842.0
115°	211.8	214.5	218.2	228.2	244.4	271.8	312.5	375.0	476.8	619.1	787.6
117.5°	236.2	239.8	243.5	253.2	271.3	297.7	336.2	393.2	481.8	606.5	754.2
120°	252.8	256.2	260.6	270.2	288.1	315.2	353.6	405.4	487.3	600.3	735.5
122.5°	269.9	272.3	275.7	285.2	304.6	331.5	369.9	419.1	491.9	594.8	719.2
125°	291.8	293.7	298.8	308.1	327.7	355.4	391.5	437.9	499.8	587.6	696.9
127.5°	308.5	311.6	318.1	329.8	350.7	378.4	412.8	455.3	509.3	583.3	676.2
130°	319.3	322.4	330.6	343.9	365.6	393.2	426.5	467.2	515.1	580.6	662.7
132.5°	327.3	331.2	341.2	356.2	378.8	406.3	439.3	477.2	521.6	579.3	651.5
135°	340.6	344.7	357.0	373.5	395.2	423.5	456.2	491.1	530.0	577.3	637.6
137.5°	357.6	360.6	372.1	388.7	409.9	438.8	468.4	501.4	538.2	577.1	625.4
140°	367.2	370.3	382.7	399.3	419.0	447.0	477.2	508.4	541.6	576.9	619.4
142.5°	378.8	381.0	392.5	409.0	427.8	454.1	482.5	512.0	543.5	577.1	614.4
145°	396.2	398.2	408.5	422.8	441.4	465.2	492.1	518.1	546.1	576.0	607.6
147.5°	414.0	415.3	424.2	437.7	453.8	474.7	498.4	521.8	547.1	573.4	600.9
150°	424.8	426.9	434.2	447.6	462.1	479.7	502.5	524.3	547.1	570.9	595.8
152.5°	436.4	437.7	444.1	455.9	469.6	485.5	506.7	525.9	546.3	567.6	590.0
155°	451.7	451.7	458.0	468.3	478.7	493.2	510.8	527.4	543.9	561.6	580.2
157.5°	465.5	465.2	470.2	479.1	488.2	499.2	514.3	528.4	541.3	555.4	571.1
160°	474.6	473.5	477.7	484.9	493.2	502.5	516.0	528.4	538.8	551.3	563.7
162.5°	482.0	481.0	485.1	491.5	498.2	505.9	517.6	527.6	536.3	546.3	557.1
165°	493.2	491.2	494.3	499.4	503.5	509.8	518.1	526.4	532.5	538.8	547.1
167.5°	500.7	499.6	501.5	504.4	507.3	511.2	518.1	523.9	526.7	531.5	537.3
170°	505.6	504.6	505.6	507.7	509.8	512.9	518.1	522.2	524.3	527.4	531.5
172.5°	509.0	507.1	508.1	510.1	511.4	512.9	517.2	520.6	520.9	522.5	525.8
175°	512.9	510.8	511.8	512.9	512.9	512.9	516.0	518.1	517.0	517.0	518.1
177.5°	514.8	513.1	513.1	513.9	513.1	513.1	514.8	515.6	513.9	513.9	514.8
180°	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	420.4	420.4	420.4	420.4	420.4	420.4	420.4	420.4
2.5°	419.4	419.9	420.4	420.6	420.5	420.5	420.4	420.4
5°	418.1	418.8	419.5	419.9	419.8	419.7	419.6	419.5
7.5°	414.6	415.3	415.9	416.2	416.1	416.0	415.9	415.8
10°	411.3	412.0	412.6	412.9	412.8	412.7	412.6	412.5
12.5°	407.4	407.9	408.4	408.5	408.3	408.0	407.8	407.6
15°	400.0	400.6	401.1	401.2	400.8	400.5	400.1	399.8
17.5°	390.7	391.0	391.5	391.6	391.4	391.1	390.9	390.7
20°	383.4	383.7	384.0	384.1	384.1	384.1	384.1	384.1
22.5°	375.9	376.3	376.7	376.7	376.5	376.3	376.0	375.9
25°	364.2	364.6	365.0	364.9	364.4	364.0	363.6	363.1
27.5°	350.5	350.8	351.1	351.2	351.0	350.8	350.6	350.4
30°	341.2	341.3	341.5	341.6	341.5	341.4	341.3	341.3
32.5°	332.3	332.4	332.6	332.7	332.6	332.5	332.4	332.3
35°	317.9	318.2	318.4	318.5	318.5	318.5	318.5	318.5
37.5°	302.7	303.1	303.4	303.6	303.6	303.5	303.5	303.4
40°	292.5	292.8	293.3	293.6	293.7	293.9	294.1	294.3
42.5°	283.1	283.6	284.0	284.2	284.3	284.3	284.3	284.4
45°	268.0	268.6	269.2	269.6	269.7	269.7	269.8	269.9
47.5°	252.3	253.2	254.1	254.7	254.9	255.1	255.3	255.5
50°	241.8	242.9	243.9	244.5	244.8	245.0	245.3	245.6
52.5°	231.5	232.6	233.6	234.3	234.4	234.7	234.9	235.1
55°	215.1	216.1	217.1	217.8	218.1	218.5	218.9	219.3
57.5°	198.9	200.0	201.2	201.9	202.2	202.4	202.8	203.0
60°	187.8	189.1	190.6	191.4	191.6	191.9	192.2	192.4
62.5°	176.6	178.1	179.6	180.5	180.8	181.2	181.6	181.9
65°	159.8	161.1	162.5	163.4	163.7	164.1	164.5	164.9
67.5°	142.6	144.2	145.9	147.0	147.4	147.9	148.4	148.8
70°	130.8	132.6	134.3	135.5	136.0	136.5	137.1	137.7
72.5°	119.9	121.8	123.7	124.8	125.2	125.6	126.0	126.4
75°	103.4	105.2	107.1	108.2	108.7	109.1	109.6	110.0
77.5°	86.9	88.9	90.9	92.1	92.5	92.8	93.2	93.5
80°	77.0	79.0	81.0	82.2	82.6	82.9	83.3	83.6
82.5°	67.6	69.6	71.5	72.8	73.5	74.1	74.7	75.4
85°	54.8	56.7	58.8	60.1	60.8	61.6	62.3	63.0
87.5°	48.0	50.3	52.6	54.4	55.0	55.7	56.5	57.2
90°	56.6	59.8	63.0	66.3	67.1	67.7	69.4	70.0
92.5°	220.2	171.8	140.9	126.9	114.3	112.4	111.6	110.6
95°	779.1	623.6	498.2	412.5	339.6	309.1	301.5	285.5
97.5°	1141.4	1032.9	910.6	790.9	727.5	670.0	640.6	628.0
100°	1304.7	1255.8	1151.0	1044.5	973.6	899.5	861.7	845.7
102.5°	1358.7	1391.9	1342.6	1270.8	1194.9	1142.4	1101.3	1089.4
105°	1323.6	1467.3	1514.7	1504.6	1472.1	1438.5	1418.4	1406.7
107.5°	1204.7	1395.9	1514.7	1570.0	1587.4	1587.8	1581.5	1573.8
110°	1117.0	1315.6	1463.5	1552.7	1600.0	1620.3	1628.2	1628.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1047.6	1236.2	1385.5	1490.6	1559.3	1593.8	1612.5	1620.6
115°	960.2	1122.4	1266.1	1380.1	1461.4	1511.7	1541.2	1555.3
117.5°	902.9	1042.9	1166.7	1271.4	1352.8	1404.9	1434.3	1443.2
120°	871.7	997.6	1113.1	1205.4	1282.6	1332.9	1361.5	1370.3
122.5°	847.9	964.6	1067.6	1154.0	1223.0	1269.1	1297.6	1305.6
125°	813.3	920.5	1012.1	1087.6	1146.1	1189.1	1212.4	1223.2
127.5°	778.1	878.1	963.6	1034.3	1087.5	1125.5	1147.6	1152.7
130°	756.2	848.6	930.8	999.0	1051.2	1085.9	1107.1	1113.7
132.5°	734.1	820.8	895.5	961.2	1013.3	1047.9	1067.4	1074.8
135°	705.1	777.8	845.3	905.2	951.2	985.9	1005.0	1011.6
137.5°	680.6	739.5	795.7	846.5	887.7	919.2	936.7	944.0
140°	667.0	716.7	765.4	809.6	848.3	875.6	891.5	897.1
142.5°	655.2	697.4	739.2	777.6	810.5	833.7	848.7	853.5
145°	640.2	672.8	705.3	733.8	759.0	776.9	788.7	793.3
147.5°	626.3	652.6	677.3	698.7	718.5	732.8	739.6	741.6
150°	618.6	641.4	661.0	679.8	695.4	707.9	712.1	713.3
152.5°	610.3	630.6	648.6	663.2	676.2	686.2	690.4	691.4
155°	597.8	614.4	628.9	640.3	650.7	657.9	661.0	662.1
157.5°	585.4	599.1	610.3	619.2	627.2	633.3	636.1	636.0
160°	577.1	587.5	597.8	605.1	612.3	617.5	619.6	618.6
162.5°	568.0	577.6	586.2	592.6	598.2	602.6	603.1	602.8
165°	555.4	562.6	568.8	574.0	578.2	580.2	580.2	580.2
167.5°	543.3	548.1	552.9	556.6	558.7	560.5	559.7	559.5
170°	536.7	539.8	543.0	545.0	547.1	548.1	548.1	547.1
172.5°	529.2	532.4	534.7	535.9	536.3	538.1	536.5	535.5
175°	521.2	521.2	523.3	523.3	523.3	524.3	522.2	521.2
177.5°	515.6	516.4	516.4	516.4	515.6	516.4	513.9	513.9
180°	513.9	513.9	513.9	513.9	513.9	513.9	513.9	513.9

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