

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: P332579-930

Luminaire Tested: **S124DIP-S575D1205U930-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P332579-930
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-18,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S124DIP-S575D1205U930-4F0-1E-UDD-F4
Description: DEFINE 4 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 575 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1205 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5541.6 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.17 / 1.3
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Semi-Indirect

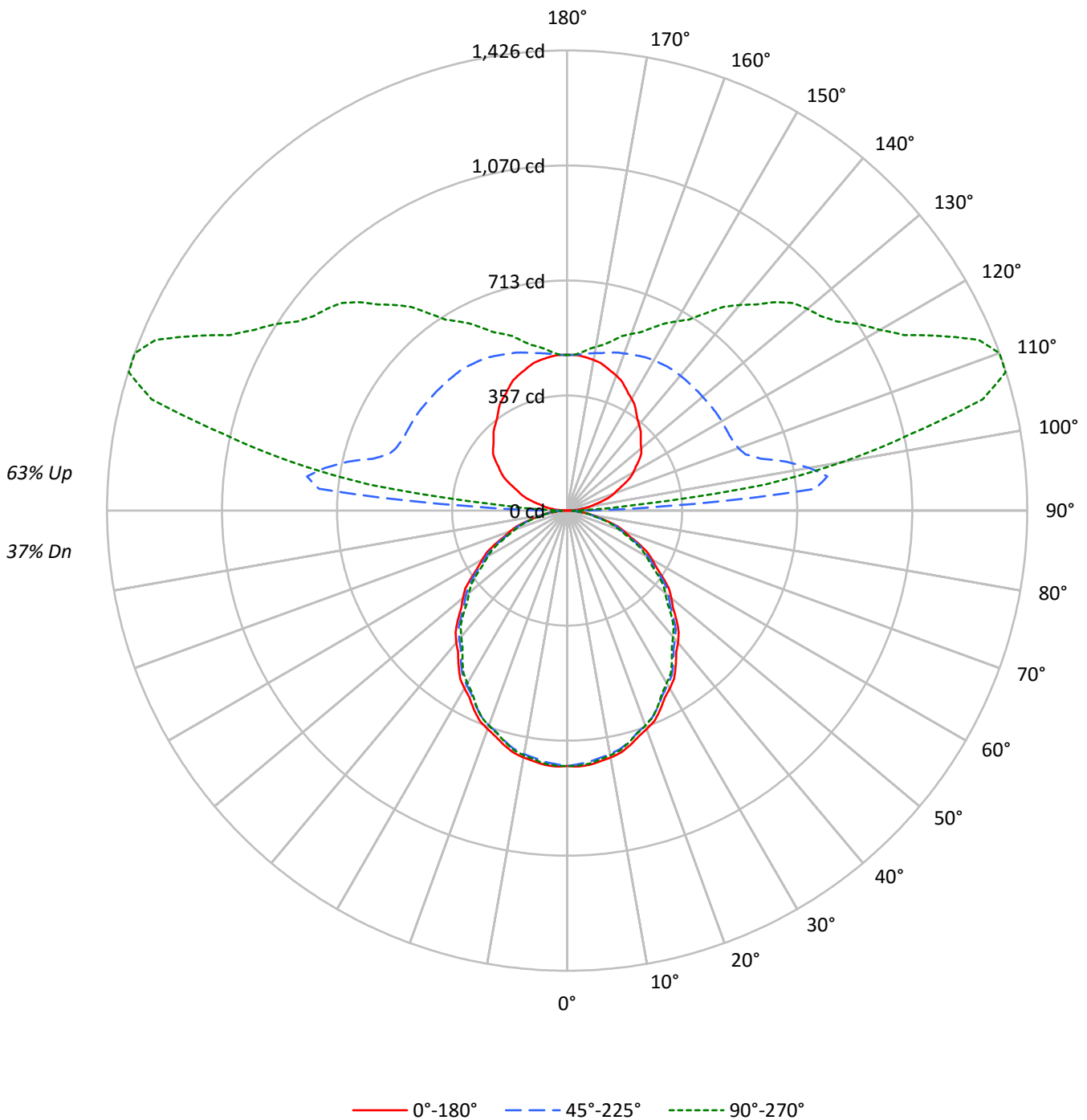
Input Watts (W): 49.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44	37
1	95	91	87	83	86	82	79	76	66	64	62	52	51	49	39	38	37	31
2	86	79	73	68	78	72	67	62	58	55	51	46	43	41	34	33	31	26
3	79	69	62	57	71	63	57	52	51	47	43	40	37	35	30	28	26	22
4	72	61	54	48	65	56	49	44	46	41	37	36	32	30	27	25	23	19
5	66	55	47	41	59	50	43	38	41	36	32	32	29	26	24	22	20	16
6	61	49	41	35	55	45	38	33	37	31	27	29	25	22	22	19	17	14
7	56	44	36	31	51	40	33	29	33	28	24	26	23	20	20	17	15	13
8	52	40	32	27	47	37	30	25	30	25	21	24	20	18	18	16	14	11
9	48	36	29	24	44	33	27	22	28	23	19	22	18	16	17	14	12	10
10	45	33	26	21	41	31	24	20	25	20	17	20	17	14	16	13	11	9

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6391	6391	6391
5°	6412	6334	6380
10°	6370	6283	6314
15°	6294	6193	6209
20°	6192	6082	6088
25°	6075	5956	5940
30°	5931	5808	5754
35°	5784	5653	5577
40°	5630	5476	5376
45°	5469	5302	5200
50°	5291	5148	4987
55°	5098	4947	4787
60°	4907	4721	4579
65°	4690	4508	4327
70°	4447	4223	4057
75°	4077	3877	3780
80°	3626	3477	3394
85°	3168	3057	3001



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	74.6	1.3
10°-20°	210.1	3.8
20°-30°	309.2	5.6
30°-40°	359.5	6.5
40°-50°	359.5	6.5
50°-60°	314.5	5.7
60°-70°	233.5	4.2
70°-80°	132.7	2.4
80°-90°	40.9	0.7
90°-100°	348.3	6.3
100°-110°	724.9	13.1
110°-120°	649.3	11.7
120°-130°	546.2	9.9
130°-140°	455.4	8.2
140°-150°	347.9	6.3
150°-160°	244.5	4.4
160°-170°	143.8	2.6
170°-180°	46.8	0.8
0°-30°	593.9	10.7
0°-40°	953.4	17.2
0°-60°	1627.3	29.4
0°-90°	2034.5	36.7
90°-120°	1722.5	31.1
90°-150°	3071.9	55.4
90°-180°	3507.0	63.3
0°-180°	5541.6	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	792	792	792	792	792	
5°	791	788	782	788	787	75
15°	753	750	741	744	743	212
25°	682	677	669	669	667	314
35°	587	582	574	569	566	367
45°	479	474	464	458	456	369
55°	362	360	352	344	340	324
65°	246	242	236	230	226	243
75°	131	128	124	122	121	139
85°	34	34	33	33	32	38
90°	1	8	17	19	20	4
95°	31	99	772	382	231	35
105°	111	161	622	1338	1333	118
115°	195	245	554	1065	1280	193
125°	272	323	551	906	1021	242
135°	323	385	547	804	913	250
145°	372	426	544	678	746	234
155°	424	457	529	599	624	195
165°	461	476	507	537	545	130
175°	481	482	486	493	491	46
180°	482	482	482	482	482	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	791.7	791.7	791.7	791.7	791.7	791.7	791.7	791.7	791.7	791.7	791.7
2.5°	793.8	793.4	793.1	792.8	792.5	791.7	790.4	789.2	787.9	786.7	787.8
5°	791.2	790.6	790.0	789.5	788.9	787.8	786.3	784.7	783.2	781.6	783.2
7.5°	783.7	783.2	782.7	782.1	781.5	780.4	778.7	777.0	775.2	773.5	774.8
10°	777.1	776.7	776.1	775.5	774.9	773.7	771.9	770.1	768.3	766.4	767.5
12.5°	768.6	768.0	767.4	766.9	766.3	765.1	763.1	761.2	759.2	757.2	758.5
15°	753.1	752.5	752.0	751.4	750.8	749.5	747.4	745.3	743.1	741.0	741.8
17.5°	734.4	733.7	733.0	732.3	731.6	730.3	728.2	726.3	724.2	722.3	722.8
20°	720.7	720.0	719.3	718.6	717.9	716.5	714.4	712.2	710.1	708.0	708.4
22.5°	706.0	705.1	704.2	703.2	702.3	700.7	698.6	696.5	694.4	692.3	693.1
25°	682.0	681.0	680.0	679.1	678.1	676.6	674.6	672.6	670.7	668.7	668.9
27.5°	654.6	653.6	652.6	651.6	650.5	649.1	647.3	645.5	643.6	641.8	641.5
30°	636.3	635.2	634.1	632.9	631.9	630.3	628.5	626.6	624.8	623.1	622.5
32.5°	617.0	616.0	615.0	614.0	613.0	611.5	609.6	607.6	605.7	603.7	603.1
35°	586.9	585.9	584.9	583.9	582.9	581.4	579.4	577.5	575.5	573.6	572.5
37.5°	555.0	554.1	553.2	552.3	551.4	549.9	547.8	545.7	543.6	541.4	540.4
40°	534.2	533.0	531.9	530.8	529.7	528.1	525.9	523.8	521.7	519.6	518.2
42.5°	511.8	511.2	510.5	509.8	509.2	507.6	505.3	503.0	500.6	498.3	496.7
45°	479.0	478.0	477.0	476.1	475.1	473.4	471.2	468.9	466.7	464.4	462.8
47.5°	444.6	443.9	443.3	442.5	441.9	440.5	438.5	436.3	434.2	432.2	430.4
50°	421.3	420.7	420.1	419.6	419.0	417.8	415.8	413.8	411.8	409.9	407.9
52.5°	398.4	397.8	397.1	396.4	395.7	394.4	392.2	390.2	388.1	386.0	384.3
55°	362.2	361.8	361.4	361.0	360.6	359.4	357.4	355.4	353.4	351.5	349.8
57.5°	327.8	327.3	326.8	326.3	325.8	324.7	322.7	320.7	318.8	316.8	315.2
60°	303.9	303.2	302.5	301.7	301.1	299.8	298.0	296.1	294.3	292.4	291.2
62.5°	280.5	280.0	279.3	278.8	278.2	276.9	275.0	273.0	271.1	269.1	268.0
65°	245.5	244.8	244.1	243.4	242.7	241.7	240.3	238.8	237.4	236.0	234.6
67.5°	210.3	209.6	209.0	208.3	207.7	206.7	205.3	204.0	202.6	201.2	199.9
70°	188.4	187.4	186.5	185.5	184.5	183.4	182.3	181.2	180.0	178.9	177.8
72.5°	165.1	164.1	163.1	162.1	161.1	160.2	159.3	158.4	157.5	156.5	155.6
75°	130.7	130.0	129.3	128.6	127.8	127.2	126.5	125.7	125.1	124.3	123.8
77.5°	97.8	97.5	97.2	96.9	96.6	96.1	95.5	94.9	94.2	93.7	93.4
80°	78.0	77.6	77.2	76.8	76.3	76.0	75.7	75.4	75.2	74.8	74.6
82.5°	58.8	58.5	58.4	58.1	58.0	57.8	57.8	57.7	57.6	57.6	57.4
85°	34.2	34.2	34.2	34.2	34.2	34.1	33.8	33.6	33.3	33.0	33.0
87.5°	13.4	13.6	14.1	14.2	14.3	14.2	15.2	15.1	15.3	15.6	15.4
90°	1.0	2.9	5.7	6.6	7.6	7.6	13.3	13.3	15.2	17.0	16.1
92.5°	10.8	15.7	24.6	36.2	50.1	69.7	117.9	191.4	263.0	300.5	250.3
95°	31.2	34.1	43.6	55.9	78.6	118.5	200.8	356.2	582.6	772.1	793.9
97.5°	56.1	56.1	64.2	75.6	95.1	128.5	191.9	320.2	545.3	813.3	997.4
100°	72.0	72.0	78.6	90.0	108.0	138.4	194.2	301.3	494.6	761.7	1004.2
102.5°	87.2	88.7	94.6	105.2	122.4	151.2	201.8	296.0	460.4	697.2	947.4
105°	110.9	113.7	118.5	129.8	146.8	174.3	219.8	298.4	431.0	621.5	844.1
107.5°	137.0	138.8	143.7	155.7	172.0	199.2	240.8	312.4	425.7	579.0	760.8
110°	154.4	156.3	161.0	172.4	189.5	215.1	256.7	323.0	427.3	564.7	719.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	171.1	173.0	178.5	189.1	206.2	231.7	271.9	334.4	431.8	557.8	695.5
115°	195.2	198.0	204.6	214.1	232.1	257.7	295.5	352.5	440.5	554.2	673.6
117.5°	220.1	222.8	228.7	239.1	256.0	282.5	318.5	370.8	449.8	553.3	663.7
120°	236.8	238.7	245.4	255.8	271.9	298.4	334.4	383.7	456.6	553.3	658.4
122.5°	252.0	253.9	260.6	270.2	287.8	313.6	349.6	395.8	463.5	552.5	652.4
125°	271.9	275.7	281.4	291.8	309.8	336.3	370.4	414.0	473.7	551.4	642.3
127.5°	289.5	292.5	299.4	311.3	330.0	356.8	389.7	429.7	481.8	549.3	628.8
130°	299.4	303.1	310.7	325.0	342.9	370.4	402.7	439.6	487.9	548.5	620.5
132.5°	309.2	312.3	322.1	335.6	355.1	381.1	413.3	449.5	493.2	547.8	612.9
135°	323.0	326.9	336.3	352.5	372.3	397.0	428.2	462.4	501.2	546.7	601.6
137.5°	336.9	340.5	350.9	366.2	386.9	410.4	439.6	471.4	505.9	546.4	591.7
140°	346.7	349.6	360.0	376.1	396.0	418.7	447.2	477.4	509.7	545.7	586.4
142.5°	357.3	360.2	369.8	385.2	404.3	426.3	454.0	482.0	512.7	545.7	581.9
145°	372.3	375.2	384.7	397.9	415.9	436.8	461.4	487.0	514.5	543.8	574.1
147.5°	389.1	390.1	398.4	412.1	427.1	445.8	469.0	491.3	515.4	540.4	567.1
150°	399.8	400.7	408.3	419.7	433.9	451.9	472.7	493.6	515.4	538.1	561.8
152.5°	409.6	409.9	417.4	428.0	440.8	457.2	475.8	495.1	513.9	534.3	555.7
155°	423.5	424.4	430.1	439.6	450.0	464.2	480.3	496.4	511.6	528.6	546.7
157.5°	436.9	436.9	442.2	449.6	458.7	469.9	483.6	496.4	509.2	522.8	537.4
160°	445.2	445.2	449.1	455.7	463.3	473.7	485.0	496.4	506.9	518.2	530.5
162.5°	452.8	452.1	455.1	461.0	467.8	476.0	486.6	496.4	504.6	513.6	524.5
165°	461.4	461.4	463.3	468.0	472.7	478.4	487.0	494.6	500.2	506.9	514.5
167.5°	469.9	469.0	469.9	473.5	476.1	480.5	486.7	492.3	495.7	500.0	505.3
170°	473.7	472.7	473.7	476.5	478.4	481.3	486.0	490.7	492.6	495.5	499.3
172.5°	477.4	476.5	476.7	478.8	480.0	482.0	485.3	489.3	489.6	490.9	494.0
175°	481.3	480.3	480.3	481.3	482.2	482.2	484.1	487.0	486.0	486.0	487.9
177.5°	483.0	482.2	481.4	482.2	482.2	482.2	483.0	484.5	483.0	483.0	483.7
180°	482.2	482.2	482.2	482.2	482.2	482.2	482.2	482.2	482.2	482.2	482.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	791.7	791.7	791.7	791.7	791.7	791.7	791.7	791.7
2.5°	789.0	790.1	791.2	791.7	791.6	791.5	791.4	791.2
5°	784.7	786.3	787.8	788.5	788.1	787.9	787.6	787.3
7.5°	776.0	777.2	778.4	779.0	778.9	778.7	778.5	778.3
10°	768.7	769.8	770.9	771.4	771.0	770.8	770.5	770.2
12.5°	759.8	761.0	762.2	762.6	762.2	761.8	761.5	761.1
15°	742.7	743.6	744.4	744.6	744.2	743.8	743.3	742.9
17.5°	723.3	723.8	724.4	724.5	724.2	723.9	723.7	723.4
20°	708.9	709.3	709.7	709.8	709.5	709.2	709.0	708.7
22.5°	693.8	694.6	695.4	695.5	695.0	694.5	694.0	693.4
25°	669.0	669.1	669.3	669.0	668.5	667.9	667.3	666.8
27.5°	641.2	640.7	640.4	639.9	639.2	638.5	637.8	637.1
30°	621.9	621.3	620.8	620.1	619.4	618.7	618.0	617.3
32.5°	602.3	601.7	601.0	600.3	599.7	598.9	598.2	597.5
35°	571.5	570.5	569.6	568.8	568.0	567.3	566.6	565.9
37.5°	539.3	538.2	537.1	536.1	535.2	534.3	533.4	532.4
40°	516.8	515.4	514.0	512.9	512.2	511.5	510.8	510.1
42.5°	495.0	493.3	491.7	490.6	490.2	489.8	489.3	488.8
45°	461.3	459.7	458.2	457.2	456.8	456.4	455.9	455.5
47.5°	428.7	426.9	425.2	423.8	422.7	421.6	420.5	419.5
50°	405.9	403.9	401.9	400.6	399.7	398.8	398.0	397.1
52.5°	382.5	380.7	379.0	377.6	376.5	375.4	374.4	373.3
55°	348.1	346.4	344.7	343.4	342.6	341.8	340.9	340.1
57.5°	313.6	312.0	310.4	309.2	308.3	307.5	306.7	305.9
60°	289.9	288.7	287.4	286.4	285.7	285.0	284.3	283.6
62.5°	266.8	265.6	264.5	263.6	262.9	262.2	261.5	260.7
65°	233.2	231.8	230.4	229.3	228.6	227.9	227.2	226.5
67.5°	198.5	197.2	195.8	195.0	194.9	194.7	194.4	194.3
70°	176.7	175.5	174.4	173.7	173.2	172.8	172.4	171.9
72.5°	154.7	153.8	153.0	152.3	151.9	151.5	151.1	150.6
75°	123.2	122.6	122.1	121.7	121.6	121.5	121.3	121.2
77.5°	93.3	93.1	92.9	92.7	92.3	92.0	91.6	91.2
80°	74.3	74.0	73.7	73.5	73.4	73.2	73.1	73.0
82.5°	57.2	57.1	56.9	56.7	56.7	56.5	56.3	56.2
85°	33.0	33.0	33.0	32.9	32.8	32.6	32.5	32.4
87.5°	15.6	15.8	16.0	16.0	16.1	16.4	16.1	16.1
90°	17.0	18.0	18.9	18.9	19.9	20.9	19.9	19.9
92.5°	186.1	140.0	111.5	92.5	81.3	76.1	73.0	73.0
95°	702.0	555.1	428.2	336.3	289.9	260.6	243.4	231.1
97.5°	1037.2	982.6	890.0	791.1	723.0	666.0	637.6	617.9
100°	1142.6	1161.5	1115.1	1045.0	962.5	904.7	876.4	868.8
102.5°	1137.3	1231.2	1244.6	1215.4	1164.9	1123.0	1093.1	1087.0
105°	1061.0	1225.0	1318.7	1357.6	1359.5	1351.9	1338.6	1332.9
107.5°	952.8	1127.4	1259.5	1343.9	1390.7	1412.3	1421.8	1424.3
110°	887.7	1051.6	1189.0	1293.1	1360.4	1400.2	1417.3	1425.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	839.9	984.9	1114.7	1218.9	1295.3	1343.4	1367.3	1381.1
115°	792.0	908.6	1019.4	1110.4	1185.2	1242.0	1272.4	1279.9
117.5°	768.5	865.0	952.1	1029.2	1093.1	1140.8	1171.5	1177.4
120°	757.9	846.0	921.8	989.0	1043.1	1084.8	1109.4	1119.8
122.5°	748.8	833.9	902.9	961.8	1007.5	1043.1	1063.9	1074.3
125°	733.3	814.7	880.1	932.2	970.1	997.6	1015.6	1021.2
127.5°	714.3	792.2	857.4	906.9	944.9	969.4	984.6	990.2
130°	699.2	774.0	838.5	888.7	927.5	951.1	966.3	972.0
132.5°	683.2	753.6	816.4	866.7	904.7	931.5	945.8	951.5
135°	661.3	722.8	780.6	828.0	865.9	892.4	907.6	913.3
137.5°	641.4	693.5	742.2	785.0	820.4	846.6	859.1	865.9
140°	630.0	674.5	717.1	756.9	790.1	811.0	824.2	831.8
142.5°	619.4	658.6	695.2	729.7	759.0	778.4	790.1	795.4
145°	604.5	636.7	665.0	691.6	715.3	731.4	740.9	745.6
147.5°	592.2	617.7	640.4	661.3	678.7	692.5	699.8	701.4
150°	584.6	606.3	625.3	642.3	657.5	669.8	675.5	676.5
152.5°	576.2	594.9	612.4	626.4	639.3	649.3	652.7	653.7
155°	563.7	578.9	593.0	604.5	613.9	621.5	624.4	624.4
157.5°	550.2	563.0	574.9	584.0	591.2	596.9	598.6	598.6
160°	541.9	552.3	562.7	570.3	576.0	581.7	582.6	582.6
162.5°	533.5	542.5	550.7	557.4	561.6	567.3	568.3	567.4
165°	522.0	527.7	534.3	539.1	542.8	546.7	545.7	544.8
167.5°	510.9	515.2	520.5	523.3	525.2	527.7	527.5	526.8
170°	504.0	506.9	510.6	513.5	515.4	516.3	515.4	515.4
172.5°	497.9	500.0	502.3	504.3	505.5	506.5	505.5	504.0
175°	489.8	490.7	492.6	492.6	492.6	494.6	492.6	490.7
177.5°	484.5	485.3	485.3	486.0	485.3	486.0	484.5	483.0
180°	482.2	482.2	482.2	482.2	482.2	482.2	482.2	482.2

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