

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: P333222-927

Luminaire Tested: **S125DIP-S850D590U927-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333222-927
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-S850D590U927-4F0-1E-UDD-F4
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 850 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 590 LUMENS PER FOOT, BATWING OPTIC
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 4388.2 lumens
Efficiency: N/A
Efficacy: 108.9 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: Semi-Direct

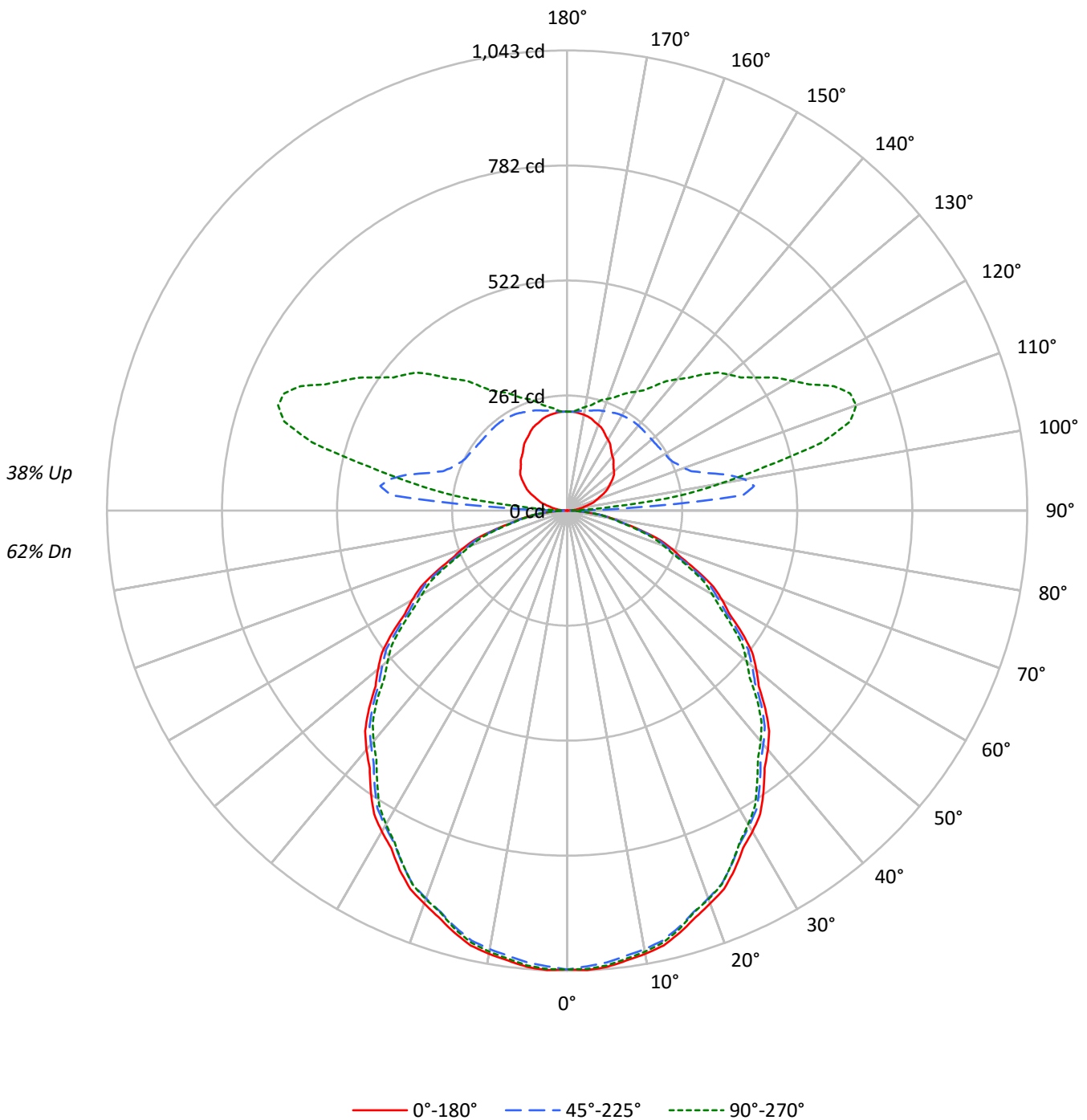
Input Watts (W): 40.3
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333222-927

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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	110	110	110	110	103	103	103	103	90	90	90	78	78	78	67	67	67	62
1	100	96	92	88	94	90	86	83	79	76	74	68	67	65	59	58	56	52
2	91	84	77	72	85	79	73	68	69	65	61	60	57	54	52	50	47	43
3	83	74	66	60	78	69	62	57	61	56	51	53	49	46	46	43	40	37
4	76	65	57	51	71	61	54	48	54	48	44	47	43	39	41	38	35	31
5	70	58	50	44	65	55	47	42	48	42	38	43	38	34	37	33	30	27
6	65	52	44	38	60	49	42	36	44	38	33	38	34	30	34	30	27	24
7	60	47	39	33	56	45	37	32	40	34	29	35	30	26	31	27	24	21
8	56	43	35	30	52	41	33	28	36	30	26	32	27	24	28	24	21	19
9	52	39	32	26	48	37	30	25	33	27	23	30	25	21	26	22	19	17
10	48	36	29	24	45	34	27	23	31	25	21	27	23	19	24	20	17	16

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	6716	6716	6716
5°	6731	6667	6710
10°	6690	6620	6658
15°	6618	6540	6568
20°	6514	6429	6441
25°	6402	6297	6291
30°	6264	6154	6123
35°	6117	6000	5916
40°	5966	5833	5751
45°	5802	5681	5569
50°	5621	5497	5332
55°	5447	5290	5141
60°	5239	5079	4899
65°	4991	4828	4664
70°	4755	4538	4381
75°	4332	4190	4045
80°	3857	3794	3704
85°	3349	3416	3231



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	98.1	2.2
10°-20°	277.0	6.3
20°-30°	409.0	9.3
30°-40°	477.2	10.9
40°-50°	479.3	10.9
50°-60°	420.7	9.6
60°-70°	313.5	7.1
70°-80°	179.3	4.1
80°-90°	53.4	1.2
90°-100°	162.5	3.7
100°-110°	349.2	8.0
110°-120°	327.8	7.5
120°-130°	265.6	6.1
130°-140°	213.2	4.9
140°-150°	160.9	3.7
150°-160°	113.2	2.6
160°-170°	66.7	1.5
170°-180°	21.7	0.5
0°-30°	784.0	17.9
0°-40°	1261.2	28.7
0°-60°	2161.2	49.3
0°-90°	2707.4	61.7
90°-120°	839.5	19.1
90°-150°	1479.1	33.7
90°-180°	1681.0	38.3
0°-180°	4388.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1040	1040	1040	1040	1040	
5°	1038	1036	1028	1035	1035	98
15°	990	987	978	982	982	279
25°	898	894	884	885	883	413
35°	776	772	761	757	750	485
45°	635	631	622	612	610	489
55°	484	481	470	462	457	432
65°	327	325	316	309	305	324
75°	174	172	168	165	162	185
85°	45	46	46	45	44	51
90°	0	4	7	9	10	3
95°	15	44	400	182	106	16
105°	51	71	328	645	599	54
115°	91	110	263	567	667	90
125°	126	148	252	451	526	112
135°	148	178	250	378	436	115
145°	173	198	251	313	344	108
155°	197	212	245	277	289	91
165°	215	221	235	249	253	61
175°	224	224	226	228	227	21
180°	224	224	224	224	224	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9
2.5°	1042.6	1042.1	1041.7	1041.2	1040.8	1039.8	1038.4	1037.0	1035.5	1034.0	1035.5
5°	1038.3	1037.9	1037.5	1037.2	1036.8	1035.7	1033.9	1032.1	1030.2	1028.4	1030.1
7.5°	1028.7	1028.4	1028.0	1027.6	1027.3	1026.1	1024.1	1022.1	1020.1	1018.0	1019.6
10°	1020.2	1019.9	1019.5	1019.1	1018.7	1017.6	1015.5	1013.5	1011.5	1009.5	1011.0
12.5°	1009.6	1009.0	1008.4	1007.7	1007.0	1005.8	1003.9	1002.0	1000.1	998.3	999.5
15°	989.8	989.2	988.6	988.1	987.5	986.3	984.3	982.2	980.2	978.2	979.1
17.5°	966.9	966.1	965.3	964.5	963.7	962.2	960.1	958.1	955.9	953.9	955.0
20°	947.8	947.5	947.1	946.7	946.3	944.9	942.5	940.2	937.8	935.4	936.8
22.5°	928.7	928.0	927.4	926.7	926.1	924.6	922.4	920.1	917.9	915.7	916.6
25°	898.4	897.5	896.6	895.6	894.8	893.1	890.7	888.4	886.0	883.6	884.0
27.5°	863.0	862.5	862.0	861.4	860.9	859.4	856.9	854.4	852.0	849.5	849.6
30°	840.0	839.5	838.9	838.4	837.8	836.1	833.5	830.7	827.9	825.2	824.8
32.5°	815.0	814.1	813.3	812.5	811.7	810.0	807.6	805.1	802.6	800.2	799.5
35°	775.9	775.1	774.4	773.6	772.9	771.3	768.7	766.1	763.6	761.0	760.1
37.5°	735.2	734.3	733.3	732.5	731.5	729.8	727.5	725.0	722.6	720.3	718.8
40°	707.6	706.6	705.8	704.8	703.9	702.2	699.6	697.0	694.5	691.9	690.3
42.5°	677.9	677.2	676.4	675.7	674.9	673.2	670.7	668.0	665.5	663.0	661.5
45°	635.2	634.4	633.7	633.0	632.2	630.7	628.6	626.4	624.2	622.0	619.8
47.5°	589.1	589.1	589.1	589.1	589.2	588.0	585.3	582.7	580.0	577.4	575.1
50°	559.4	558.9	558.3	557.8	557.3	555.9	553.7	551.5	549.3	547.1	544.7
52.5°	529.2	528.8	528.4	528.0	527.6	526.2	523.9	521.5	519.2	516.8	514.8
55°	483.8	483.2	482.7	482.1	481.6	480.0	477.4	474.9	472.3	469.8	468.1
57.5°	435.9	435.6	435.3	435.0	434.7	433.5	431.3	429.2	427.0	424.8	422.7
60°	405.6	404.9	404.2	403.4	402.7	401.3	399.3	397.3	395.3	393.2	391.4
62.5°	374.0	373.4	372.9	372.2	371.7	370.5	368.8	367.1	365.4	363.6	361.7
65°	326.6	326.2	325.9	325.5	325.2	324.0	321.9	320.0	317.9	315.9	314.3
67.5°	280.7	280.0	279.2	278.4	277.7	276.5	275.0	273.5	272.0	270.5	269.1
70°	251.8	250.8	249.9	249.0	248.1	246.8	245.2	243.5	241.9	240.3	239.2
72.5°	220.1	219.5	218.9	218.3	217.7	216.8	215.8	214.7	213.7	212.6	211.4
75°	173.6	173.3	172.9	172.5	172.1	171.5	170.6	169.7	168.7	167.9	167.3
77.5°	130.6	130.5	130.4	130.2	130.1	129.8	129.2	128.7	128.2	127.7	127.4
80°	103.7	103.7	103.7	103.7	103.7	103.5	103.1	102.7	102.3	102.0	101.9
82.5°	79.9	79.7	79.4	79.1	78.8	78.6	78.5	78.5	78.4	78.3	78.0
85°	45.2	45.5	45.6	45.8	45.9	46.1	46.1	46.1	46.1	46.1	45.9
87.5°	17.8	18.0	18.1	18.3	18.5	18.6	18.5	18.6	18.5	18.5	18.6
90°	0.5	0.9	1.8	2.7	3.6	4.5	5.0	5.9	6.3	7.2	7.7
92.5°	5.5	6.7	10.5	16.1	23.8	37.1	61.7	103.1	148.1	145.7	118.0
95°	14.9	15.4	19.0	23.9	33.9	54.3	102.6	202.0	326.7	400.4	391.8
97.5°	24.8	25.3	27.8	32.8	41.7	56.4	88.4	161.2	291.8	427.5	495.7
100°	31.6	32.6	34.4	39.3	47.9	61.5	87.7	146.4	260.3	408.1	521.0
102.5°	39.2	39.8	41.2	46.6	54.4	67.6	90.9	140.3	236.4	373.7	505.8
105°	51.1	51.1	53.3	57.8	65.0	77.7	97.6	137.8	213.3	327.6	457.3
107.5°	62.7	63.5	65.7	69.4	76.9	88.3	107.6	142.0	203.5	295.9	407.8
110°	71.0	71.9	73.7	77.7	84.5	96.3	114.8	145.9	200.7	281.1	379.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	79.3	80.2	81.6	85.7	92.4	103.9	121.7	151.0	200.7	272.4	358.6
115°	91.3	92.2	93.6	97.6	104.4	115.7	132.4	158.6	202.0	263.0	335.7
117.5°	102.1	103.5	105.0	109.0	116.7	127.6	143.5	167.3	204.9	258.4	322.1
120°	109.3	110.7	112.5	116.6	124.3	135.5	151.4	173.1	207.9	256.2	314.5
122.5°	116.9	118.0	119.4	123.4	131.9	143.1	159.0	179.6	210.4	254.4	308.0
125°	126.5	127.5	129.7	133.7	142.4	154.1	169.0	188.5	214.7	252.2	299.1
127.5°	134.0	135.4	138.3	143.5	152.6	164.3	178.6	196.5	219.4	251.0	291.0
130°	138.7	140.1	143.7	149.6	159.1	170.8	184.8	202.0	222.4	250.3	285.6
132.5°	142.4	144.1	148.4	155.0	164.9	176.6	190.6	206.7	225.6	250.3	281.2
135°	148.2	150.0	155.4	162.7	172.1	184.3	198.4	213.3	230.0	250.3	276.1
137.5°	155.7	157.0	162.1	169.3	178.6	191.2	203.9	218.2	234.1	250.9	271.5
140°	159.9	161.3	166.8	174.0	182.6	194.8	207.9	221.4	235.9	251.3	269.3
142.5°	165.0	166.0	171.1	178.3	186.6	198.0	210.4	223.2	236.9	251.6	267.5
145°	172.6	173.5	178.0	184.3	192.5	202.9	214.7	225.9	238.1	251.3	264.8
147.5°	180.5	181.1	185.0	190.8	197.9	207.1	217.4	227.6	238.6	250.1	262.0
150°	185.3	186.2	189.3	195.2	201.5	209.2	219.2	228.6	238.6	249.0	259.8
152.5°	190.4	190.8	193.7	198.8	204.8	211.8	220.9	229.3	238.2	247.6	257.3
155°	197.0	197.0	199.7	204.2	208.7	215.1	222.8	230.0	237.3	244.9	253.0
157.5°	203.0	202.9	205.1	209.0	212.9	217.7	224.3	230.4	236.1	242.2	249.1
160°	207.0	206.5	208.3	211.5	215.1	219.2	225.1	230.4	235.0	240.4	245.8
162.5°	210.2	209.8	211.6	214.4	217.3	220.6	225.8	230.1	233.9	238.2	243.0
165°	215.1	214.2	215.6	217.8	219.6	222.4	225.9	229.6	232.3	235.0	238.6
167.5°	218.3	217.9	218.7	220.0	221.3	222.9	225.9	228.5	229.7	231.8	234.3
170°	220.5	220.1	220.5	221.4	222.4	223.7	225.9	227.8	228.6	230.0	231.8
172.5°	222.0	221.2	221.6	222.5	223.1	223.7	225.6	227.0	227.2	227.8	229.3
175°	223.7	222.8	223.2	223.7	223.7	223.7	225.1	225.9	225.5	225.5	225.9
177.5°	224.5	223.8	223.8	224.1	223.8	223.8	224.5	224.8	224.1	224.1	224.5
180°	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9	1039.9
2.5°	1037.0	1038.4	1039.8	1040.5	1040.4	1040.2	1040.1	1039.9
5°	1031.7	1033.3	1035.0	1035.7	1035.5	1035.4	1035.1	1035.0
7.5°	1021.3	1022.9	1024.5	1025.2	1025.0	1024.8	1024.6	1024.5
10°	1012.4	1013.9	1015.3	1016.0	1015.8	1015.6	1015.4	1015.3
12.5°	1000.6	1001.8	1003.0	1003.5	1003.5	1003.5	1003.5	1003.4
15°	980.1	981.0	981.9	982.3	982.3	982.3	982.3	982.3
17.5°	956.2	957.3	958.4	958.5	957.6	956.7	955.8	954.9
20°	938.0	939.3	940.6	940.7	939.8	938.9	938.0	937.1
22.5°	917.3	918.2	919.1	919.2	918.5	917.9	917.3	916.7
25°	884.3	884.7	885.1	884.9	884.5	883.9	883.4	882.8
27.5°	849.7	849.8	849.9	849.6	849.1	848.5	848.0	847.4
30°	824.5	824.1	823.7	823.3	822.8	822.2	821.7	821.1
32.5°	798.8	798.2	797.6	796.7	795.7	794.7	793.8	792.8
35°	759.2	758.3	757.4	756.2	754.7	753.3	751.8	750.4
37.5°	717.5	716.1	714.8	713.7	712.9	712.0	711.2	710.3
40°	688.6	687.0	685.3	684.2	683.7	683.2	682.6	682.1
42.5°	660.0	658.5	657.0	655.8	655.0	654.1	653.2	652.4
45°	617.6	615.4	613.2	611.8	611.3	610.8	610.2	609.7
47.5°	572.9	570.7	568.5	566.7	565.5	564.2	562.8	561.6
50°	542.3	540.0	537.6	535.8	534.5	533.2	532.0	530.7
52.5°	512.7	510.6	508.5	506.8	505.3	503.9	502.5	501.1
55°	466.5	464.9	463.2	461.8	460.4	459.1	457.9	456.6
57.5°	420.6	418.5	416.4	414.9	414.2	413.6	412.9	412.2
60°	389.6	387.8	386.0	384.4	383.1	381.8	380.6	379.3
62.5°	359.7	357.7	355.8	354.3	353.3	352.3	351.3	350.3
65°	312.7	311.0	309.3	308.2	307.4	306.7	305.9	305.2
67.5°	267.8	266.3	265.0	264.0	263.6	263.2	262.7	262.3
70°	238.1	236.9	235.8	235.0	234.2	233.5	232.7	232.0
72.5°	210.1	208.9	207.6	206.6	205.9	205.2	204.5	203.7
75°	166.8	166.2	165.6	165.0	164.3	163.5	162.8	162.1
77.5°	127.1	126.7	126.4	126.0	125.4	124.9	124.5	123.9
80°	101.6	101.5	101.3	101.0	100.7	100.3	99.9	99.6
82.5°	77.6	77.3	77.0	76.8	76.8	76.7	76.6	76.5
85°	45.7	45.6	45.3	45.1	44.7	44.4	44.0	43.6
87.5°	18.8	18.9	18.9	18.9	18.7	18.4	18.1	17.9
90°	8.2	8.6	9.0	9.9	9.9	9.9	10.4	10.4
92.5°	80.1	58.1	43.7	37.1	31.3	30.2	29.5	28.8
95°	324.9	256.2	200.7	162.7	130.6	117.0	113.4	106.2
97.5°	483.9	435.7	381.6	328.8	300.9	275.5	262.4	256.7
100°	555.8	533.7	487.1	440.1	408.9	376.4	359.7	352.4
102.5°	580.0	593.7	571.3	539.6	506.2	483.1	464.9	459.5
105°	565.8	627.6	647.5	642.5	628.1	613.2	604.2	598.7
107.5°	514.8	597.4	648.5	672.0	679.4	679.3	676.3	672.6
110°	477.2	563.1	626.8	665.2	685.5	694.1	697.3	697.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	447.6	529.1	593.5	638.8	668.5	683.3	691.1	694.3
115°	410.3	480.4	542.2	591.5	626.8	648.5	661.1	667.0
117.5°	386.3	446.6	499.9	545.2	580.4	602.9	615.4	619.0
120°	373.3	427.5	477.2	517.0	550.4	572.1	584.3	587.9
122.5°	363.5	413.8	458.0	495.3	525.1	544.9	557.1	560.4
125°	349.3	395.4	434.7	467.2	492.6	511.1	521.0	525.5
127.5°	334.9	377.9	414.5	445.0	467.9	484.3	493.7	495.7
130°	325.8	365.6	400.8	430.2	452.8	467.7	476.7	479.4
132.5°	316.8	354.0	386.0	414.3	436.9	451.8	460.1	463.2
135°	305.0	336.2	365.1	390.9	410.7	425.6	433.8	436.5
137.5°	295.1	320.3	344.4	366.2	384.0	397.6	405.0	408.1
140°	289.6	310.9	331.7	350.7	367.4	379.1	385.9	388.2
142.5°	284.9	302.9	320.8	337.3	351.5	361.4	367.8	369.7
145°	278.8	292.8	306.8	319.0	329.9	337.5	342.5	344.4
147.5°	273.1	284.4	295.2	304.4	313.0	319.1	322.0	322.8
150°	269.7	279.7	288.3	296.4	303.2	308.6	310.5	310.9
152.5°	266.2	275.0	282.9	289.2	294.9	299.2	301.0	301.5
155°	260.7	268.0	274.3	279.2	283.8	286.9	288.3	288.8
157.5°	255.3	261.3	266.2	270.1	273.5	276.2	277.4	277.3
160°	251.7	256.2	260.7	263.9	267.0	269.3	270.2	269.7
162.5°	247.7	251.9	255.6	258.5	260.9	262.8	263.0	262.9
165°	242.2	245.3	248.1	250.3	252.2	253.0	253.0	253.0
167.5°	236.9	239.1	241.1	242.7	243.7	244.5	244.1	244.0
170°	234.1	235.4	236.8	237.7	238.6	239.1	239.1	238.6
172.5°	230.8	232.2	233.1	233.7	233.9	234.7	234.0	233.5
175°	227.3	227.3	228.2	228.2	228.2	228.6	227.8	227.3
177.5°	224.8	225.2	225.2	225.2	224.8	225.2	224.1	224.1
180°	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1

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