

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: P333147-927

Luminaire Tested: **S125DIP-S375D1035U927-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333147-927  
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-S375D1035U927-4F0-1E-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: 4100.3 lumens  
Efficiency: N/A  
Efficacy: 109.9 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

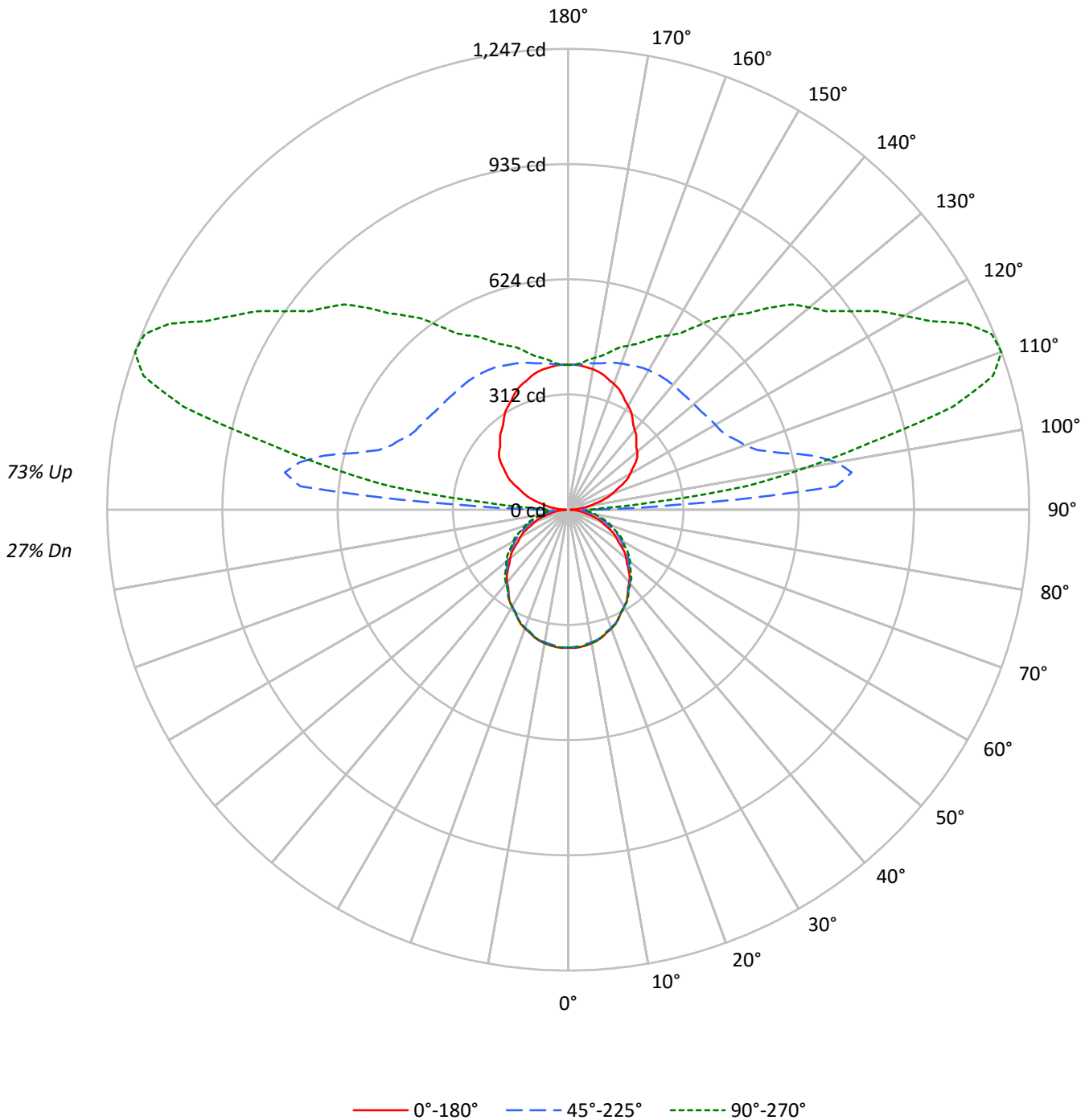
Input Watts (W): 37.3  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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°	2412	2412	2412
5°	2416	2367	2375
10°	2399	2324	2322
15°	2371	2274	2253
20°	2333	2212	2186
25°	2287	2145	2103
30°	2231	2071	2027
35°	2179	2003	1957
40°	2127	1932	1887
45°	2067	1871	1825
50°	2010	1805	1770
55°	1941	1743	1706
60°	1866	1671	1640
65°	1789	1597	1567
70°	1700	1494	1490
75°	1558	1397	1397
80°	1377	1278	1295
85°	1203	1197	1263



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	35.3	0.9
10°-20°	100.2	2.4
20°-30°	149.1	3.6
30°-40°	176.6	4.3
40°-50°	182.6	4.5
50°-60°	168.2	4.1
60°-70°	135.9	3.3
70°-80°	91.0	2.2
80°-90°	49.4	1.2
90°-100°	310.8	7.6
100°-110°	630.7	15.4
110°-120°	586.7	14.3
120°-130°	472.3	11.5
130°-140°	376.3	9.2
140°-150°	282.2	6.9
150°-160°	198.2	4.8
160°-170°	116.8	2.8
170°-180°	38.0	0.9
0°-30°	284.6	6.9
0°-40°	461.2	11.2
0°-60°	812.0	19.8
0°-90°	1088.4	26.5
90°-120°	1528.2	37.3
90°-150°	2659.0	64.8
90°-180°	3012.0	73.5
0°-180°	4100.3	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	373	373	373	373	373	
5°	373	373	370	373	373	35
15°	357	357	354	356	355	100
25°	324	325	323	324	323	149
35°	280	283	282	283	283	175
45°	231	235	237	239	240	178
55°	178	183	189	193	195	159
65°	122	131	140	145	146	121
75°	67	77	89	96	98	71
85°	20	32	45	53	56	21
90°	7	25	43	55	59	5
95°	31	92	727	352	223	31
105°	93	134	594	1156	1078	98
115°	162	198	474	1013	1190	159
125°	223	261	450	803	936	198
135°	260	312	441	669	773	202
145°	302	346	440	549	606	189
155°	345	371	429	484	505	159
165°	376	387	411	436	443	106
175°	391	391	395	399	398	37
180°	392	392	392	392	392	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4
2.5°	374.3	374.1	374.1	373.9	373.8	373.5	373.0	372.6	372.2	371.7	372.2
5°	373.4	373.3	373.1	373.0	372.8	372.4	371.9	371.3	370.7	370.1	370.8
7.5°	370.1	370.1	370.0	369.9	369.9	369.6	369.0	368.4	367.8	367.2	367.8
10°	367.2	367.2	367.2	367.2	367.2	366.9	366.2	365.6	365.0	364.2	364.9
12.5°	363.1	363.2	363.2	363.3	363.4	363.1	362.7	362.1	361.6	361.1	361.5
15°	356.6	356.6	356.7	356.9	357.0	356.6	356.1	355.5	355.0	354.4	354.9
17.5°	348.1	348.2	348.4	348.6	348.7	348.6	348.0	347.4	346.8	346.3	346.7
20°	342.0	342.1	342.3	342.5	342.6	342.4	341.8	341.3	340.7	340.1	340.4
22.5°	334.9	335.3	335.5	335.8	336.1	335.9	335.3	334.6	334.0	333.4	333.7
25°	324.0	324.2	324.5	324.7	325.0	324.9	324.4	323.9	323.4	322.9	323.2
27.5°	311.9	312.2	312.6	312.9	313.3	313.2	312.7	312.1	311.6	311.0	311.2
30°	302.8	303.2	303.7	304.3	304.8	304.8	304.3	303.7	303.2	302.8	302.9
32.5°	294.6	295.0	295.4	295.9	296.3	296.3	296.0	295.6	295.2	294.9	295.0
35°	280.4	281.0	281.6	282.2	282.7	282.9	282.7	282.4	282.2	281.9	282.2
37.5°	266.3	266.8	267.4	267.8	268.4	268.6	268.5	268.5	268.4	268.3	268.6
40°	256.7	257.3	257.9	258.6	259.3	259.5	259.4	259.4	259.3	259.2	259.5
42.5°	246.1	246.9	247.8	248.7	249.5	250.0	250.2	250.3	250.6	250.7	251.1
45°	231.0	232.0	232.8	233.7	234.6	235.3	235.7	236.1	236.5	236.9	237.4
47.5°	215.6	216.4	217.2	218.1	218.9	219.7	220.4	221.0	221.7	222.4	223.3
50°	205.0	205.9	206.8	207.7	208.6	209.5	210.4	211.3	212.1	213.1	214.0
52.5°	193.9	195.0	196.1	197.2	198.3	199.3	200.4	201.5	202.6	203.7	204.7
55°	177.5	178.9	180.1	181.5	182.8	184.1	185.4	186.6	188.0	189.3	190.2
57.5°	160.9	162.4	164.0	165.6	167.2	168.7	170.2	171.7	173.2	174.6	175.6
60°	149.7	151.4	153.0	154.6	156.2	157.9	159.5	161.1	162.8	164.4	165.6
62.5°	138.9	140.5	142.2	143.8	145.4	147.1	148.9	150.6	152.4	154.2	155.5
65°	122.3	124.1	126.0	127.9	129.8	131.7	133.6	135.6	137.5	139.5	140.7
67.5°	106.6	108.4	110.2	112.0	113.8	115.7	117.7	119.7	121.7	123.7	125.2
70°	95.2	97.0	98.9	100.8	102.7	104.6	106.8	108.9	111.0	113.1	114.7
72.5°	84.1	86.0	87.9	89.8	91.8	94.0	96.3	98.5	100.8	103.1	104.9
75°	67.3	69.5	71.6	73.7	75.8	78.2	80.8	83.4	86.0	88.6	90.2
77.5°	51.3	53.8	56.2	58.6	61.1	63.5	66.1	68.6	71.1	73.6	75.4
80°	41.4	43.8	46.3	48.7	51.1	53.7	56.5	59.3	62.0	64.8	66.6
82.5°	32.3	34.9	37.5	40.0	42.5	45.3	48.1	50.9	53.8	56.6	58.3
85°	20.1	22.8	25.5	28.2	30.9	33.7	36.5	39.4	42.2	45.0	46.8
87.5°	11.6	14.3	17.3	20.2	23.1	26.1	29.0	32.1	35.0	38.1	40.2
90°	6.7	10.1	14.3	18.4	22.6	26.9	30.4	34.8	38.3	42.7	45.3
92.5°	14.9	19.4	28.4	40.6	56.6	82.4	128.4	203.7	285.1	283.8	237.0
95°	30.9	33.7	42.2	53.0	72.6	110.6	198.0	374.7	595.7	727.4	714.2
97.5°	47.7	50.5	56.9	67.4	85.0	112.9	171.6	301.7	532.7	773.2	894.1
100°	59.4	62.7	67.6	78.0	94.7	120.6	169.1	274.4	476.3	737.5	936.9
102.5°	72.4	74.9	79.0	89.9	105.3	130.4	173.7	262.7	433.5	676.3	909.1
105°	92.7	94.0	99.2	108.4	122.4	146.4	183.6	256.4	390.9	593.5	822.0
107.5°	112.5	115.2	120.0	127.6	141.9	163.5	199.6	262.1	372.2	536.2	733.6
110°	126.7	129.3	133.4	141.5	154.3	176.6	211.3	268.1	366.1	509.1	683.0



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	141.2	143.6	146.9	154.9	167.5	188.9	222.3	275.9	365.0	492.7	645.1
115°	161.9	164.1	167.1	174.8	187.1	208.3	239.6	287.6	365.7	474.5	603.3
117.5°	180.5	183.3	186.2	193.7	207.6	227.8	257.5	301.3	369.2	464.7	577.6
120°	193.2	195.8	199.2	206.6	220.3	241.1	270.7	310.5	373.3	459.7	563.2
122.5°	206.2	208.0	210.7	217.9	232.7	253.5	283.0	320.8	376.6	455.4	550.5
125°	222.9	224.4	228.2	235.3	250.3	271.6	299.3	334.9	382.5	449.7	533.2
127.5°	235.7	238.0	243.0	251.8	267.8	288.9	315.4	348.1	389.4	446.1	517.2
130°	243.9	246.1	252.4	262.6	279.2	300.2	325.9	357.0	393.8	443.9	506.8
132.5°	249.9	252.9	260.5	272.0	289.2	310.2	335.6	364.6	398.5	442.8	498.0
135°	260.2	263.2	272.6	285.2	301.7	323.3	348.4	375.0	404.9	441.0	487.2
137.5°	273.0	275.3	284.1	296.7	312.9	335.0	357.6	382.9	411.0	440.7	477.7
140°	280.4	282.7	292.2	304.8	319.9	341.3	364.2	388.1	413.4	440.5	472.9
142.5°	289.1	290.8	299.6	312.2	326.5	346.6	368.3	390.8	414.9	440.5	469.1
145°	302.5	304.0	311.8	322.7	336.9	355.1	375.7	395.4	416.8	439.7	463.8
147.5°	316.0	317.0	323.8	334.1	346.3	362.3	380.4	398.2	417.6	437.6	458.7
150°	324.2	325.8	331.4	341.7	352.7	366.1	383.6	400.1	417.6	435.7	454.7
152.5°	333.1	334.1	339.0	347.9	358.4	370.6	386.7	401.4	416.9	433.2	450.3
155°	344.8	344.8	349.5	357.4	365.4	376.4	389.8	402.5	415.2	428.6	442.8
157.5°	355.2	355.1	358.9	365.7	372.6	381.0	392.5	403.3	413.1	423.9	435.9
160°	362.2	361.4	364.6	370.1	376.4	383.6	393.8	403.3	411.2	420.7	430.2
162.5°	367.9	367.1	370.3	375.2	380.2	386.1	395.1	402.7	409.3	416.9	425.2
165°	376.4	374.9	377.2	381.2	384.4	389.1	395.4	401.7	406.5	411.2	417.6
167.5°	382.1	381.4	382.8	385.0	387.2	390.1	395.4	399.8	402.0	405.7	410.1
170°	386.0	385.2	386.0	387.5	389.1	391.4	395.4	398.5	400.1	402.5	405.7
172.5°	388.5	387.1	387.9	389.4	390.3	391.4	394.7	397.3	397.6	398.7	401.2
175°	391.4	389.8	390.6	391.4	391.4	391.4	393.8	395.4	394.6	394.6	395.4
177.5°	392.8	391.6	391.6	392.2	391.6	391.6	392.8	393.5	392.2	392.2	392.8
180°	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	373.4	373.4	373.4	373.4	373.4	373.4	373.4	373.4
2.5°	372.6	373.0	373.5	373.7	373.6	373.6	373.5	373.4
5°	371.5	372.1	372.7	373.0	373.0	372.9	372.8	372.7
7.5°	368.4	368.9	369.5	369.7	369.6	369.6	369.5	369.4
10°	365.4	366.0	366.5	366.8	366.7	366.6	366.5	366.5
12.5°	361.9	362.3	362.8	362.9	362.7	362.5	362.3	362.1
15°	355.4	355.8	356.3	356.4	356.1	355.8	355.5	355.1
17.5°	347.1	347.4	347.8	347.8	347.7	347.5	347.3	347.1
20°	340.6	340.9	341.1	341.2	341.2	341.2	341.2	341.2
22.5°	334.0	334.3	334.6	334.7	334.5	334.3	334.1	333.9
25°	323.5	323.9	324.2	324.2	323.8	323.4	323.0	322.6
27.5°	311.4	311.6	311.9	312.0	311.8	311.6	311.5	311.3
30°	303.1	303.2	303.4	303.5	303.4	303.3	303.2	303.2
32.5°	295.2	295.3	295.5	295.6	295.5	295.4	295.3	295.2
35°	282.4	282.7	282.9	283.0	283.0	283.0	283.0	283.0
37.5°	268.9	269.3	269.6	269.7	269.7	269.7	269.7	269.6
40°	259.8	260.2	260.5	260.8	260.9	261.1	261.3	261.4
42.5°	251.5	251.9	252.3	252.5	252.5	252.5	252.5	252.6
45°	238.1	238.6	239.2	239.5	239.6	239.6	239.7	239.8
47.5°	224.1	225.0	225.8	226.2	226.5	226.6	226.8	227.0
50°	214.8	215.8	216.7	217.2	217.5	217.7	217.9	218.2
52.5°	205.7	206.6	207.6	208.1	208.3	208.5	208.7	208.8
55°	191.1	191.9	192.9	193.5	193.8	194.1	194.5	194.8
57.5°	176.7	177.7	178.7	179.4	179.6	179.8	180.1	180.4
60°	166.8	168.0	169.3	170.0	170.2	170.5	170.7	171.0
62.5°	156.9	158.2	159.5	160.3	160.7	161.0	161.3	161.6
65°	142.0	143.1	144.3	145.1	145.4	145.8	146.2	146.5
67.5°	126.7	128.1	129.6	130.6	130.9	131.4	131.8	132.2
70°	116.2	117.8	119.3	120.3	120.8	121.3	121.8	122.3
72.5°	106.5	108.2	109.9	110.9	111.2	111.6	111.9	112.3
75°	91.9	93.5	95.1	96.1	96.6	97.0	97.4	97.8
77.5°	77.2	79.0	80.7	81.8	82.1	82.5	82.8	83.1
80°	68.4	70.2	71.9	73.0	73.4	73.7	74.0	74.3
82.5°	60.0	61.8	63.5	64.6	65.3	65.8	66.4	67.0
85°	48.6	50.4	52.2	53.4	54.0	54.7	55.4	56.0
87.5°	42.1	44.2	46.3	47.8	48.3	48.9	49.7	50.2
90°	48.0	50.7	53.3	56.1	56.7	57.3	58.6	59.2
92.5°	172.6	135.9	112.6	102.1	92.5	91.3	90.7	90.0
95°	598.9	480.5	385.0	319.7	264.2	241.1	235.3	223.2
97.5°	875.1	792.5	699.5	608.2	559.9	516.2	493.8	484.3
100°	999.6	962.5	882.7	801.6	747.5	691.1	662.3	650.1
102.5°	1040.6	1066.2	1028.7	974.1	916.2	876.2	844.9	836.0
105°	1013.5	1123.5	1159.9	1152.3	1127.5	1102.0	1086.8	1077.8
107.5°	922.5	1068.7	1159.7	1202.0	1215.3	1215.6	1210.9	1205.1
110°	855.4	1007.2	1120.2	1188.5	1224.7	1240.2	1246.4	1247.0





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	802.2	946.3	1060.7	1140.9	1193.5	1219.8	1234.1	1240.4
115°	735.3	859.3	969.1	1056.3	1118.5	1156.9	1179.6	1190.3
117.5°	691.3	798.3	893.0	973.0	1035.3	1075.1	1097.6	1104.5
120°	667.3	763.6	852.0	922.5	981.5	1019.9	1041.8	1048.6
122.5°	649.0	738.2	817.1	883.1	935.8	971.1	992.9	999.1
125°	622.3	704.3	774.4	832.2	876.9	909.7	927.5	935.8
127.5°	595.2	671.6	737.0	791.2	831.8	860.9	877.8	881.8
130°	578.3	649.0	711.9	764.1	804.0	830.5	846.7	851.8
132.5°	561.3	627.6	684.8	735.0	774.9	801.3	816.2	822.0
135°	538.8	594.5	646.1	692.0	727.1	753.7	768.3	773.4
137.5°	519.9	565.0	608.1	647.0	678.4	702.5	716.0	721.5
140°	509.5	547.5	584.8	618.6	648.2	669.1	681.3	685.6
142.5°	500.3	532.6	564.7	594.0	619.2	636.9	648.5	652.1
145°	488.8	513.7	538.6	560.3	579.6	593.3	602.4	605.9
147.5°	478.1	498.1	517.1	533.4	548.5	559.4	564.7	566.2
150°	472.1	489.5	504.5	518.8	530.8	540.3	543.6	544.5
152.5°	465.8	481.3	495.0	506.1	516.1	523.7	526.9	527.7
155°	456.3	469.0	480.1	488.7	496.6	502.2	504.5	505.3
157.5°	446.8	457.2	465.8	472.6	478.8	483.3	485.5	485.4
160°	440.5	448.4	456.3	461.8	467.4	471.3	472.9	472.1
162.5°	433.6	440.8	447.4	452.3	456.6	459.9	460.3	460.1
165°	423.9	429.4	434.2	438.1	441.2	442.8	442.8	442.8
167.5°	414.7	418.4	422.0	424.8	426.4	427.9	427.2	427.1
170°	409.6	412.0	414.4	416.0	417.6	418.4	418.4	417.6
172.5°	403.9	406.3	408.1	409.0	409.3	410.7	409.5	408.7
175°	397.8	397.8	399.3	399.3	399.3	400.1	398.5	397.8
177.5°	393.5	394.1	394.1	394.1	393.5	394.1	392.2	392.2
180°	392.2	392.2	392.2	392.2	392.2	392.2	392.2	392.2

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