

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: P333156-830

Luminaire Tested: **S125DIP-S375D1205U830-4F0-1E-UDD-D4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333156-830  
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-S375D1205U830-4F0-1E-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: 5452.9 lumens  
Efficiency: N/A  
Efficacy: 129.2 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

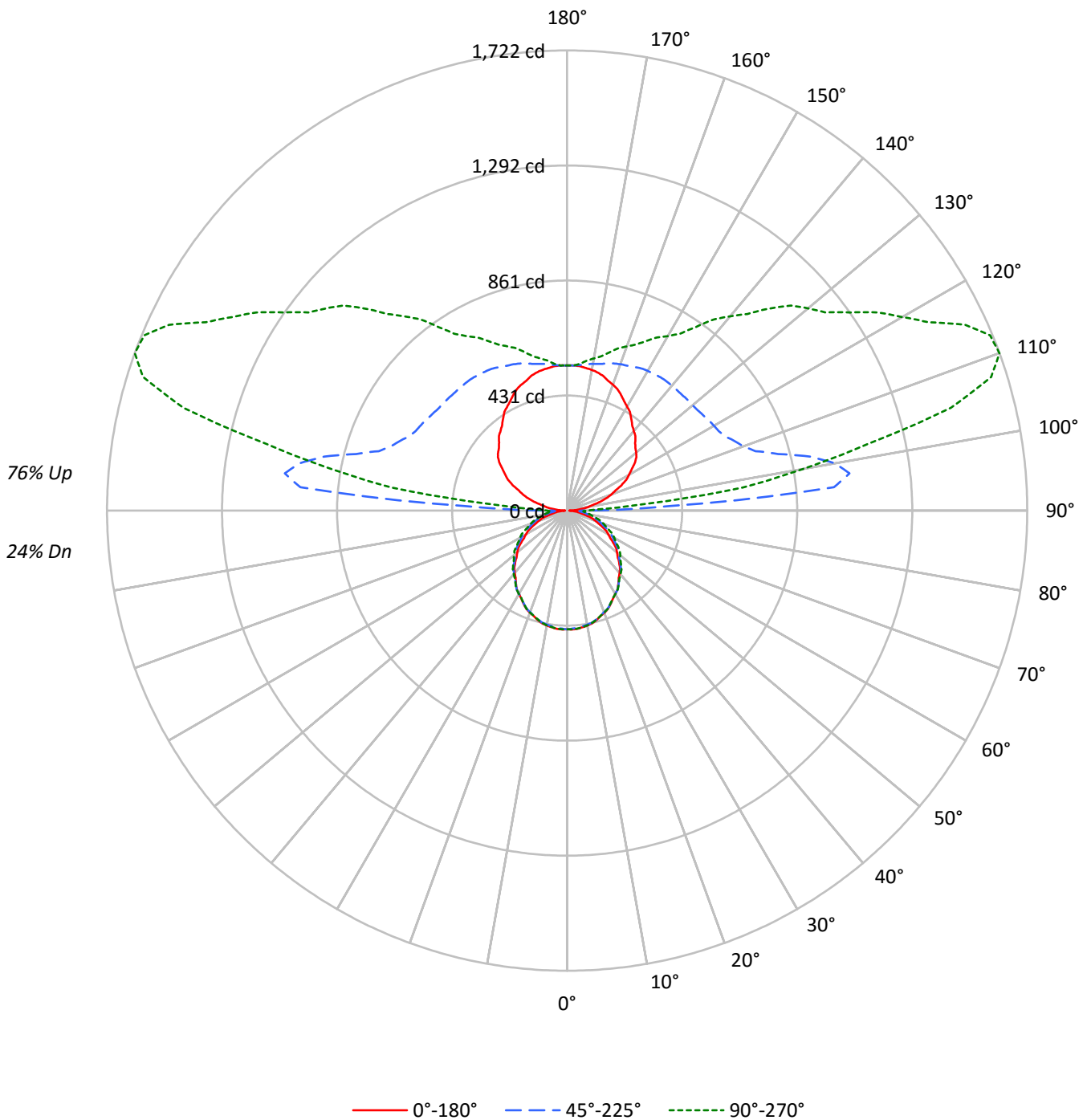
Input Watts (W): 42.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	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°	2869	2869	2869
5°	2875	2817	2826
10°	2855	2766	2762
15°	2821	2706	2681
20°	2776	2631	2601
25°	2721	2552	2502
30°	2654	2464	2411
35°	2593	2384	2329
40°	2531	2299	2245
45°	2459	2226	2171
50°	2391	2147	2106
55°	2309	2073	2030
60°	2220	1989	1951
65°	2128	1900	1864
70°	2024	1779	1773
75°	1855	1662	1662
80°	1636	1521	1540
85°	1430	1424	1502



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	42.0	0.8
10°-20°	119.3	2.2
20°-30°	177.4	3.3
30°-40°	210.1	3.9
40°-50°	217.2	4.0
50°-60°	200.1	3.7
60°-70°	161.8	3.0
70°-80°	108.3	2.0
80°-90°	59.2	1.1
90°-100°	425.3	7.8
100°-110°	869.7	15.9
110°-120°	810.0	14.9
120°-130°	652.6	12.0
130°-140°	520.5	9.5
140°-150°	390.7	7.2
150°-160°	274.4	5.0
160°-170°	161.8	3.0
170°-180°	52.6	1.0
0°-30°	338.7	6.2
0°-40°	548.8	10.1
0°-60°	966.1	17.7
0°-90°	1295.4	23.8
90°-120°	2104.9	38.6
90°-150°	3668.7	67.3
90°-180°	4157.0	76.2
0°-180°	5452.9	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	444	444	444	444	444	
5°	444	443	440	444	444	42
15°	424	424	422	424	422	119
25°	386	387	384	386	384	177
35°	334	336	336	337	337	209
45°	275	280	282	285	285	212
55°	211	218	225	230	232	189
65°	146	156	166	172	174	144
75°	80	92	105	114	116	85
85°	24	38	54	63	67	26
90°	8	31	53	68	74	7
95°	42	124	1002	481	302	43
105°	128	184	818	1596	1487	135
115°	224	273	654	1398	1644	220
125°	308	361	621	1110	1293	273
135°	360	433	610	925	1069	280
145°	419	479	609	761	838	262
155°	478	514	594	671	700	220
165°	521	536	570	604	613	147
175°	542	542	546	553	551	51
180°	543	543	543	543	543	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3
2.5°	445.4	445.2	445.1	444.9	444.8	444.4	443.8	443.3	442.8	442.2	442.8
5°	444.3	444.1	443.9	443.7	443.6	443.1	442.4	441.8	441.1	440.4	441.2
7.5°	440.4	440.4	440.3	440.2	440.1	439.7	439.0	438.3	437.6	436.9	437.6
10°	436.9	436.9	436.9	436.9	436.9	436.5	435.7	435.0	434.2	433.4	434.1
12.5°	432.1	432.2	432.2	432.3	432.3	432.1	431.5	430.8	430.2	429.6	430.1
15°	424.2	424.3	424.4	424.6	424.7	424.3	423.7	423.0	422.4	421.7	422.3
17.5°	414.2	414.3	414.5	414.7	414.9	414.7	414.1	413.3	412.6	412.0	412.5
20°	406.9	407.1	407.3	407.5	407.6	407.4	406.7	406.0	405.4	404.6	405.0
22.5°	398.5	398.9	399.2	399.5	399.9	399.6	398.9	398.1	397.4	396.6	397.0
25°	385.5	385.8	386.1	386.3	386.6	386.5	386.0	385.4	384.7	384.2	384.6
27.5°	371.1	371.5	371.9	372.3	372.8	372.7	372.0	371.4	370.7	370.0	370.2
30°	360.2	360.8	361.4	362.0	362.6	362.6	362.0	361.4	360.8	360.2	360.4
32.5°	350.5	351.0	351.5	352.0	352.5	352.5	352.1	351.7	351.3	350.8	351.0
35°	333.7	334.3	335.1	335.7	336.4	336.6	336.3	336.0	335.7	335.5	335.7
37.5°	316.9	317.4	318.1	318.7	319.3	319.6	319.5	319.4	319.3	319.2	319.6
40°	305.4	306.1	306.9	307.6	308.5	308.8	308.7	308.6	308.5	308.4	308.8
42.5°	292.8	293.8	294.8	295.9	296.8	297.5	297.7	297.8	298.1	298.3	298.8
45°	274.8	276.0	277.0	278.1	279.1	279.9	280.4	280.9	281.3	281.8	282.5
47.5°	256.5	257.5	258.4	259.5	260.4	261.4	262.2	263.0	263.8	264.7	265.7
50°	243.9	245.0	246.1	247.1	248.2	249.3	250.3	251.4	252.4	253.5	254.6
52.5°	230.7	232.0	233.3	234.6	235.9	237.1	238.5	239.8	241.1	242.3	243.6
55°	211.2	212.8	214.3	215.9	217.4	219.0	220.6	222.1	223.7	225.2	226.3
57.5°	191.4	193.2	195.1	197.0	198.9	200.7	202.5	204.2	206.0	207.7	209.0
60°	178.1	180.1	182.0	184.0	185.9	187.8	189.7	191.7	193.7	195.6	197.0
62.5°	165.2	167.2	169.2	171.1	173.1	175.0	177.1	179.2	181.3	183.4	185.0
65°	145.5	147.7	150.0	152.1	154.4	156.7	159.0	161.4	163.6	166.0	167.4
67.5°	126.9	129.0	131.1	133.3	135.4	137.7	140.1	142.4	144.8	147.1	148.9
70°	113.3	115.5	117.7	119.9	122.2	124.5	127.1	129.6	132.1	134.6	136.5
72.5°	100.0	102.4	104.6	106.9	109.2	111.8	114.5	117.3	120.0	122.7	124.8
75°	80.1	82.7	85.2	87.7	90.2	93.0	96.1	99.2	102.4	105.4	107.4
77.5°	61.1	64.0	66.9	69.7	72.7	75.6	78.6	81.6	84.5	87.6	89.7
80°	49.2	52.1	55.0	58.0	60.8	63.9	67.2	70.5	73.8	77.1	79.3
82.5°	38.5	41.5	44.6	47.6	50.6	53.9	57.2	60.6	64.0	67.3	69.4
85°	23.9	27.1	30.3	33.6	36.8	40.1	43.5	46.8	50.2	53.5	55.7
87.5°	13.9	17.2	20.6	24.2	27.7	31.4	34.9	38.6	42.1	45.8	48.3
90°	8.1	12.3	17.5	22.8	28.1	33.5	37.9	43.4	47.8	53.3	56.6
92.5°	19.6	25.4	37.4	53.8	75.6	110.7	173.8	277.5	389.7	387.4	322.3
95°	41.8	45.4	56.7	71.3	97.8	150.1	270.5	514.7	820.3	1002.1	983.4
97.5°	65.1	68.7	77.1	91.4	115.4	153.6	234.3	414.1	733.5	1065.9	1233.1
100°	81.4	85.7	92.1	106.1	129.0	164.5	231.0	376.5	655.6	1016.8	1292.7
102.5°	99.5	102.7	108.1	122.9	143.8	178.2	237.8	360.4	596.4	932.2	1254.4
105°	127.7	129.2	136.3	148.7	167.9	200.8	251.8	352.2	538.0	817.9	1134.3
107.5°	155.2	158.7	165.2	175.6	195.1	224.7	274.2	360.4	512.4	739.0	1012.1
110°	175.0	178.3	183.9	194.9	212.5	242.9	290.5	368.8	504.1	701.7	942.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	195.1	198.3	202.7	213.5	230.8	260.2	306.0	379.8	502.8	679.3	889.9
115°	223.9	226.7	230.6	241.2	258.4	287.3	330.4	396.3	504.0	654.4	832.5
117.5°	249.7	253.4	257.4	267.7	286.7	314.6	355.3	415.6	509.3	641.1	797.2
120°	267.2	270.8	275.5	285.6	304.5	333.2	373.7	428.5	515.1	634.5	777.4
122.5°	285.3	287.9	291.4	301.4	322.0	350.4	391.0	443.0	519.9	628.7	760.2
125°	308.4	310.5	315.8	325.6	346.4	375.7	413.8	462.9	528.3	621.1	736.6
127.5°	326.1	329.3	336.2	348.6	370.7	399.9	436.3	481.3	538.3	616.5	714.7
130°	337.5	340.7	349.4	363.5	386.4	415.6	450.8	493.8	544.4	613.7	700.5
132.5°	345.9	350.1	360.6	376.5	400.4	429.4	464.4	504.4	551.3	612.3	688.6
135°	360.1	364.4	377.4	394.8	417.7	447.6	482.2	519.1	560.2	610.2	673.9
137.5°	378.0	381.2	393.3	410.9	433.3	463.8	495.1	530.0	568.9	610.0	661.0
140°	388.1	391.4	404.5	422.1	442.9	472.5	504.4	537.3	572.5	609.8	654.7
142.5°	400.4	402.7	414.9	432.3	452.2	480.0	510.0	541.2	574.5	610.0	649.4
145°	418.8	420.9	431.8	447.0	466.6	491.7	520.2	547.6	577.2	608.9	642.2
147.5°	437.6	438.9	448.4	462.6	479.7	501.8	526.8	551.6	578.2	606.1	635.2
150°	449.0	451.2	458.9	473.2	488.4	507.1	531.1	554.2	578.2	603.4	629.7
152.5°	461.3	462.6	469.4	481.9	496.3	513.2	535.6	555.9	577.4	599.9	623.6
155°	477.5	477.5	484.1	495.0	506.0	521.3	539.9	557.4	575.0	593.6	613.3
157.5°	492.0	491.7	497.0	506.4	516.0	527.6	543.7	558.6	572.1	587.0	603.7
160°	501.6	500.5	504.9	512.6	521.3	531.1	545.4	558.6	569.5	582.7	595.8
162.5°	509.4	508.4	512.7	519.5	526.6	534.7	547.1	557.7	566.8	577.4	588.8
165°	521.3	519.2	522.5	527.9	532.3	538.9	547.6	556.4	562.9	569.5	578.2
167.5°	529.2	528.1	530.1	533.1	536.2	540.4	547.6	553.7	556.8	561.8	568.0
170°	534.4	533.4	534.4	536.7	538.9	542.2	547.6	552.0	554.2	557.4	561.8
172.5°	538.0	536.0	537.1	539.2	540.5	542.2	546.7	550.3	550.6	552.2	555.7
175°	542.2	539.9	541.0	542.2	542.2	542.2	545.4	547.6	546.5	546.5	547.6
177.5°	544.1	542.3	542.3	543.2	542.3	542.3	544.1	545.0	543.2	543.2	544.1
180°	543.2	543.2	543.2	543.2	543.2	543.2	543.2	543.2	543.2	543.2	543.2



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	444.3	444.3	444.3	444.3	444.3	444.3	444.3	444.3
2.5°	443.3	443.8	444.4	444.6	444.5	444.5	444.4	444.3
5°	442.0	442.7	443.5	443.8	443.7	443.7	443.6	443.5
7.5°	438.3	438.9	439.6	439.9	439.8	439.7	439.6	439.5
10°	434.8	435.5	436.1	436.4	436.3	436.2	436.1	436.0
12.5°	430.6	431.1	431.7	431.8	431.6	431.3	431.0	430.8
15°	422.8	423.4	424.0	424.0	423.7	423.3	422.9	422.5
17.5°	412.9	413.3	413.8	413.9	413.7	413.4	413.2	412.9
20°	405.3	405.6	405.9	406.0	406.0	406.0	406.0	406.0
22.5°	397.4	397.8	398.1	398.2	397.9	397.8	397.5	397.3
25°	384.9	385.4	385.8	385.7	385.2	384.7	384.3	383.8
27.5°	370.5	370.8	371.1	371.2	371.0	370.8	370.6	370.4
30°	360.6	360.8	361.0	361.1	361.0	360.9	360.8	360.7
32.5°	351.2	351.4	351.6	351.7	351.6	351.5	351.4	351.3
35°	336.0	336.3	336.6	336.7	336.7	336.7	336.7	336.7
37.5°	320.0	320.4	320.7	320.9	320.9	320.8	320.8	320.7
40°	309.2	309.5	310.0	310.3	310.5	310.7	310.9	311.0
42.5°	299.3	299.7	300.2	300.4	300.5	300.5	300.5	300.6
45°	283.2	283.9	284.6	284.9	285.0	285.1	285.2	285.3
47.5°	266.6	267.7	268.6	269.2	269.5	269.7	269.8	270.0
50°	255.6	256.7	257.8	258.4	258.7	259.0	259.3	259.6
52.5°	244.7	245.8	246.9	247.6	247.8	248.1	248.3	248.5
55°	227.3	228.4	229.5	230.2	230.5	230.9	231.4	231.8
57.5°	210.2	211.4	212.6	213.4	213.7	214.0	214.3	214.6
60°	198.5	199.9	201.4	202.3	202.6	202.8	203.1	203.4
62.5°	186.6	188.2	189.8	190.8	191.1	191.5	191.9	192.3
65°	168.9	170.3	171.7	172.7	173.1	173.4	173.9	174.3
67.5°	150.7	152.4	154.2	155.3	155.8	156.4	156.8	157.3
70°	138.3	140.2	141.9	143.2	143.7	144.3	144.9	145.5
72.5°	126.8	128.8	130.7	132.0	132.3	132.8	133.2	133.7
75°	109.3	111.2	113.2	114.3	114.9	115.4	115.8	116.3
77.5°	91.8	94.0	96.0	97.4	97.7	98.1	98.5	98.9
80°	81.3	83.5	85.6	86.9	87.3	87.7	88.0	88.4
82.5°	71.4	73.5	75.6	76.9	77.7	78.3	79.0	79.7
85°	57.9	59.9	62.1	63.5	64.3	65.1	65.9	66.6
87.5°	50.7	53.2	55.6	57.5	58.2	58.9	59.8	60.4
90°	59.9	63.2	66.5	70.1	70.9	71.5	73.3	74.0
92.5°	232.7	181.6	148.9	134.1	120.8	118.9	118.0	116.9
95°	823.5	659.1	526.6	436.0	358.9	326.7	318.7	301.8
97.5°	1206.5	1091.7	962.5	835.9	768.9	708.2	677.1	663.8
100°	1379.0	1327.4	1216.6	1104.0	1029.1	950.7	910.9	893.9
102.5°	1436.2	1471.2	1419.1	1343.2	1263.0	1207.5	1164.0	1151.5
105°	1399.0	1551.0	1601.1	1590.4	1556.0	1520.5	1499.3	1486.9
107.5°	1273.4	1475.5	1601.1	1659.5	1677.9	1678.3	1671.7	1663.5
110°	1180.7	1390.6	1546.9	1641.2	1691.2	1712.7	1721.0	1721.6





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	1107.3	1306.6	1464.5	1575.6	1648.2	1684.6	1704.4	1713.0
115°	1014.9	1186.4	1338.2	1458.8	1544.7	1597.9	1629.1	1644.0
117.5°	954.3	1102.3	1233.2	1343.9	1429.9	1485.0	1516.1	1525.5
120°	921.4	1054.5	1176.6	1274.1	1355.8	1408.9	1439.1	1448.4
122.5°	896.3	1019.5	1128.5	1219.7	1292.7	1341.4	1371.6	1380.1
125°	859.7	973.0	1069.8	1149.6	1211.4	1256.9	1281.5	1292.9
127.5°	822.5	928.1	1018.5	1093.3	1149.5	1189.7	1213.1	1218.4
130°	799.3	897.0	983.8	1055.9	1111.2	1147.8	1170.2	1177.2
132.5°	776.0	867.6	946.5	1016.0	1071.1	1107.7	1128.2	1136.0
135°	745.3	822.1	893.4	956.8	1005.4	1042.1	1062.2	1069.3
137.5°	719.3	781.7	841.0	894.8	938.3	971.6	990.1	997.8
140°	705.0	757.5	809.0	855.7	896.6	925.5	942.4	948.2
142.5°	692.6	737.2	781.4	821.9	856.7	881.2	897.1	902.1
145°	676.7	711.1	745.6	775.6	802.3	821.2	833.7	838.5
147.5°	662.0	689.8	716.0	738.5	759.5	774.6	781.7	783.9
150°	653.8	678.0	698.7	718.5	735.0	748.3	752.7	753.9
152.5°	645.1	666.6	685.6	701.0	714.7	725.3	729.7	730.8
155°	631.9	649.4	664.8	676.8	687.8	695.4	698.7	699.8
157.5°	618.8	633.2	645.1	654.5	663.0	669.4	672.4	672.2
160°	610.0	620.9	631.9	639.6	647.2	652.7	655.0	653.8
162.5°	600.4	610.5	619.6	626.4	632.4	637.0	637.4	637.2
165°	587.0	594.7	601.2	606.7	611.1	613.3	613.3	613.3
167.5°	574.3	579.4	584.4	588.3	590.5	592.5	591.6	591.4
170°	567.3	570.6	573.9	576.1	578.2	579.4	579.4	578.2
172.5°	559.4	562.7	565.1	566.5	566.8	568.8	567.1	566.0
175°	550.9	550.9	553.1	553.1	553.1	554.2	552.0	550.9
177.5°	545.0	545.8	545.8	545.8	545.0	545.8	543.2	543.2
180°	543.2	543.2	543.2	543.2	543.2	543.2	543.2	543.2

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