

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: P333159-930

Luminaire Tested: **S125DIP-S375D1205U930-4F0-1E-UDD-F4**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333159-930  
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-S375D1205U930-4F0-1E-UDD-F4  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 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: 4765.7 lumens  
Efficiency: N/A  
Efficacy: 112.9 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-Indirect

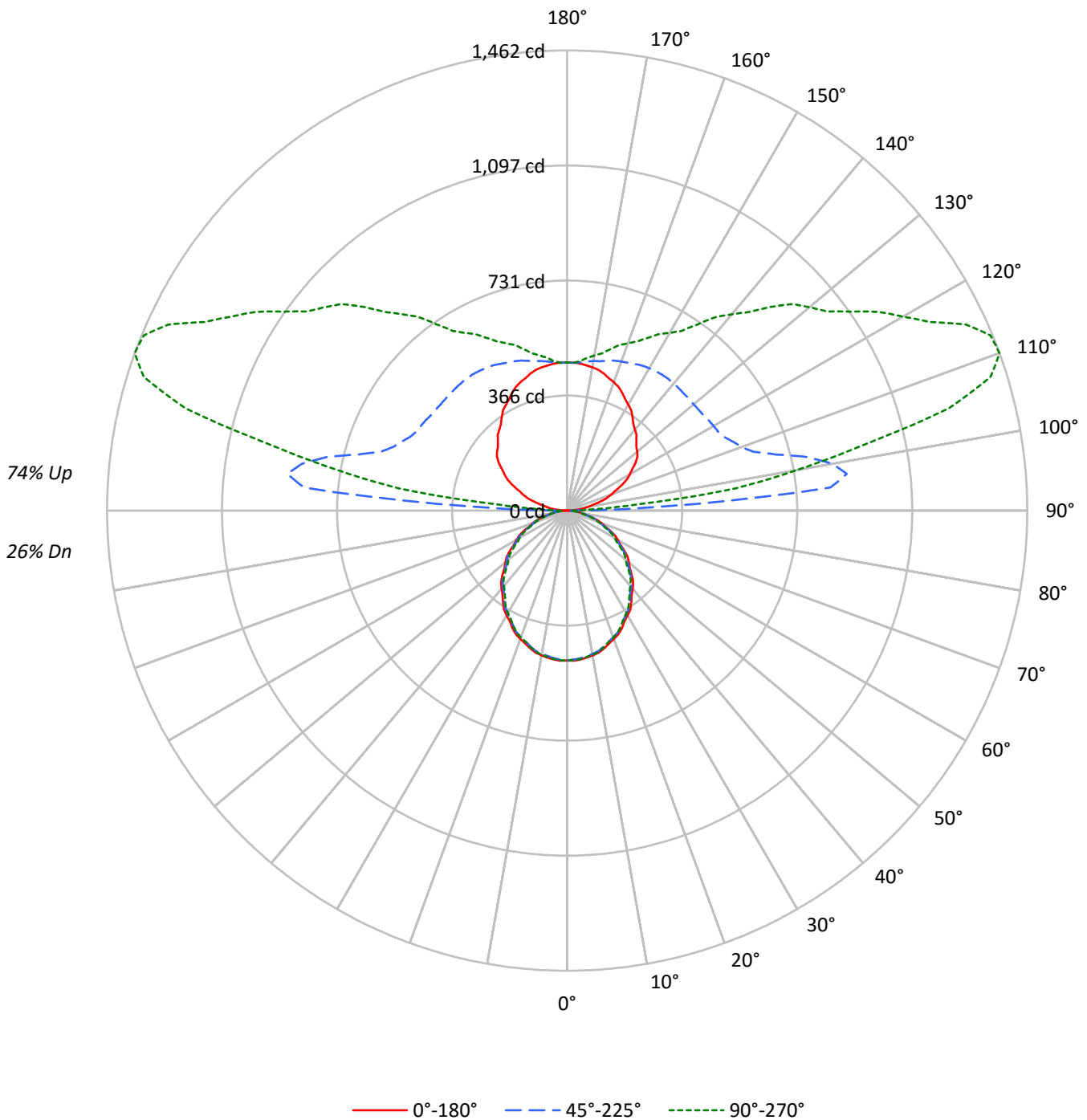
Input Watts (W): 42.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	70	70	70	51	51	51	34	34	34	26
1	92	88	84	81	82	79	76	73	61	59	57	45	44	42	30	29	29	22
2	84	77	71	66	75	69	64	60	54	50	47	39	37	35	26	25	24	18
3	77	68	61	55	68	60	55	50	47	43	40	35	32	30	23	22	20	15
4	70	60	52	46	62	53	47	42	42	37	34	31	28	26	21	19	18	13
5	64	53	45	39	57	48	41	36	37	32	29	28	24	22	19	17	15	12
6	59	47	40	34	52	43	36	31	33	29	25	25	22	19	17	15	13	10
7	54	43	35	30	48	38	32	27	30	25	22	23	19	17	15	13	12	9
8	50	38	31	26	45	35	28	24	27	23	19	21	17	15	14	12	11	8
9	47	35	28	23	42	32	25	21	25	20	17	19	16	13	13	11	10	7
10	44	32	25	20	39	29	23	19	23	18	15	17	14	12	12	10	9	7

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	3076	3076	3076
5°	3083	3053	3073
10°	3064	3032	3049
15°	3031	2995	3008
20°	2983	2944	2950
25°	2932	2884	2881
30°	2869	2818	2804
35°	2801	2748	2709
40°	2732	2672	2633
45°	2657	2602	2550
50°	2574	2517	2442
55°	2494	2423	2354
60°	2399	2326	2244
65°	2286	2211	2136
70°	2177	2079	2005
75°	1984	1919	1852
80°	1767	1737	1696
85°	1534	1564	1482



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	44.9	0.9
10°-20°	126.9	2.7
20°-30°	187.3	3.9
30°-40°	218.5	4.6
40°-50°	219.5	4.6
50°-60°	192.7	4.0
60°-70°	143.6	3.0
70°-80°	82.1	1.7
80°-90°	26.5	0.6
90°-100°	340.6	7.1
100°-110°	732.2	15.4
110°-120°	687.1	14.4
120°-130°	556.9	11.7
130°-140°	446.9	9.4
140°-150°	337.2	7.1
150°-160°	237.4	5.0
160°-170°	139.9	2.9
170°-180°	45.5	1.0
0°-30°	359.1	7.5
0°-40°	577.6	12.1
0°-60°	989.8	20.8
0°-90°	1242.0	26.1
90°-120°	1759.9	36.9
90°-150°	3100.9	65.1
90°-180°	3524.0	73.9
0°-180°	4765.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	476	475	471	474	474	45
15°	453	452	448	450	450	128
25°	412	409	405	405	404	189
35°	355	354	348	347	344	222
45°	291	289	285	281	279	224
55°	222	220	215	212	209	198
65°	150	149	145	141	140	148
75°	80	79	77	76	74	85
85°	21	21	21	21	20	23
90°	1	9	15	20	22	3
95°	31	92	839	381	223	33
105°	107	150	687	1352	1255	113
115°	191	231	551	1188	1398	188
125°	265	311	529	945	1102	235
135°	311	374	525	792	915	241
145°	362	414	527	656	722	227
155°	413	444	514	580	605	190
165°	451	463	493	522	530	127
175°	469	469	473	478	476	45
180°	470	470	470	470	470	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3
2.5°	477.4	477.3	477.1	476.9	476.7	476.2	475.6	474.9	474.3	473.5	474.3
5°	475.5	475.3	475.2	475.0	474.8	474.3	473.5	472.7	471.8	471.0	471.7
7.5°	471.2	471.0	470.8	470.7	470.5	469.9	469.0	468.1	467.2	466.3	467.0
10°	467.2	467.1	466.9	466.8	466.6	466.0	465.1	464.1	463.3	462.4	463.0
12.5°	462.4	462.1	461.8	461.5	461.2	460.6	459.7	458.9	458.0	457.2	457.7
15°	453.3	453.1	452.8	452.6	452.2	451.7	450.8	449.9	448.9	448.0	448.4
17.5°	442.8	442.5	442.1	441.7	441.3	440.7	439.7	438.8	437.8	436.8	437.4
20°	434.1	433.9	433.7	433.6	433.4	432.8	431.7	430.6	429.5	428.4	429.0
22.5°	425.3	425.0	424.7	424.4	424.1	423.5	422.4	421.4	420.4	419.4	419.8
25°	411.5	411.1	410.6	410.2	409.8	409.0	408.0	406.8	405.8	404.7	404.9
27.5°	395.3	395.0	394.8	394.5	394.3	393.5	392.5	391.3	390.2	389.1	389.1
30°	384.7	384.5	384.2	383.9	383.7	382.9	381.7	380.4	379.2	377.9	377.7
32.5°	373.2	372.8	372.5	372.1	371.7	371.0	369.8	368.7	367.6	366.5	366.2
35°	355.3	355.0	354.7	354.3	354.0	353.2	352.0	350.9	349.7	348.5	348.1
37.5°	336.7	336.3	335.9	335.4	335.0	334.3	333.1	332.1	330.9	329.9	329.2
40°	324.1	323.6	323.2	322.8	322.4	321.6	320.4	319.3	318.0	316.9	316.2
42.5°	310.5	310.1	309.8	309.4	309.1	308.3	307.1	306.0	304.8	303.6	303.0
45°	290.9	290.6	290.2	289.9	289.5	288.9	287.9	286.9	285.8	284.9	283.9
47.5°	269.8	269.8	269.8	269.9	269.9	269.3	268.1	266.8	265.6	264.4	263.4
50°	256.2	256.0	255.8	255.4	255.2	254.6	253.6	252.6	251.6	250.5	249.5
52.5°	242.4	242.1	242.0	241.8	241.7	241.0	239.9	238.9	237.7	236.7	235.8
55°	221.5	221.3	221.0	220.8	220.5	219.8	218.7	217.5	216.3	215.2	214.4
57.5°	199.7	199.5	199.3	199.3	199.1	198.5	197.5	196.6	195.6	194.6	193.6
60°	185.7	185.4	185.1	184.7	184.4	183.8	182.9	182.0	181.0	180.1	179.3
62.5°	171.3	171.0	170.7	170.5	170.2	169.7	168.9	168.1	167.3	166.6	165.7
65°	149.6	149.4	149.3	149.1	149.0	148.4	147.5	146.5	145.6	144.7	143.9
67.5°	128.6	128.2	127.8	127.5	127.2	126.6	126.0	125.2	124.6	123.9	123.3
70°	115.3	114.9	114.5	114.1	113.7	113.0	112.3	111.5	110.8	110.1	109.5
72.5°	100.9	100.5	100.3	100.0	99.7	99.3	98.8	98.3	97.8	97.3	96.8
75°	79.5	79.3	79.2	79.0	78.8	78.5	78.1	77.7	77.3	76.9	76.6
77.5°	59.8	59.8	59.7	59.6	59.6	59.4	59.2	58.9	58.7	58.5	58.3
80°	47.5	47.5	47.5	47.5	47.5	47.4	47.2	47.0	46.9	46.7	46.6
82.5°	36.6	36.5	36.4	36.2	36.1	36.0	36.0	36.0	35.9	35.9	35.7
85°	20.7	20.8	20.9	21.0	21.0	21.1	21.1	21.1	21.1	21.1	21.0
87.5°	8.3	8.5	8.9	9.3	9.6	10.0	10.1	10.4	10.5	10.8	11.1
90°	1.0	1.9	3.8	5.7	7.6	9.5	10.4	12.3	13.3	15.2	16.1
92.5°	11.6	14.0	22.0	33.8	50.1	77.7	129.4	216.2	310.4	305.4	247.3
95°	31.2	32.2	39.8	50.2	71.0	113.7	215.1	423.5	684.9	839.4	821.3
97.5°	51.9	53.1	58.4	68.8	87.6	118.2	185.3	338.0	611.6	896.3	1039.3
100°	66.3	68.2	72.0	82.4	100.4	128.8	183.8	307.0	545.7	855.4	1092.3
102.5°	82.3	83.4	86.4	97.6	114.1	141.7	190.6	294.1	495.6	783.4	1060.5
105°	107.0	107.0	111.8	121.2	136.4	163.0	204.6	288.9	447.1	686.8	958.7
107.5°	131.3	133.2	137.7	145.5	161.3	185.1	225.4	297.7	426.6	620.3	854.9
110°	148.7	150.7	154.4	163.0	177.2	201.8	240.6	306.0	420.6	589.2	795.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	166.2	168.0	171.0	179.6	193.8	217.7	255.0	316.6	420.6	571.0	751.8
115°	191.4	193.2	196.1	204.6	218.8	242.6	277.6	332.5	423.5	551.4	703.8
117.5°	214.1	217.0	220.0	228.5	244.6	267.5	300.7	350.7	429.7	541.7	675.2
120°	229.3	232.1	235.9	244.4	260.5	284.2	317.4	362.8	435.8	537.1	659.3
122.5°	245.2	247.3	250.3	258.8	276.5	300.1	333.3	376.5	441.1	533.4	645.7
125°	265.2	267.2	271.9	280.4	298.4	323.0	354.3	395.0	450.0	528.6	627.1
127.5°	281.0	283.8	289.9	300.7	319.8	344.5	374.5	412.1	460.0	526.4	610.1
130°	290.8	293.7	301.3	313.6	333.5	358.1	387.4	423.5	466.1	524.8	598.8
132.5°	298.4	302.0	311.1	325.0	345.6	370.2	399.6	433.3	472.9	524.8	589.6
135°	310.7	314.5	325.9	341.0	360.9	386.5	415.9	447.1	482.2	524.8	578.9
137.5°	326.3	329.1	339.7	354.9	374.4	400.7	427.5	457.4	490.7	525.9	569.2
140°	335.3	338.2	349.6	364.8	382.7	408.3	435.8	464.2	494.5	526.7	564.6
142.5°	345.9	348.1	358.7	373.8	391.1	415.2	441.1	468.0	496.8	527.5	560.8
145°	361.9	363.8	373.2	386.5	403.6	425.3	450.0	473.7	499.3	526.7	555.1
147.5°	378.5	379.7	387.8	400.1	414.9	434.1	455.7	477.1	500.2	524.2	549.3
150°	388.4	390.3	397.0	409.3	422.5	438.6	459.4	479.4	500.2	522.0	544.7
152.5°	399.0	400.1	406.0	416.9	429.3	443.9	463.3	480.9	499.5	518.9	539.4
155°	413.0	413.0	418.7	428.2	437.7	450.9	467.0	482.2	497.3	513.5	530.5
157.5°	425.6	425.3	429.9	438.1	446.4	456.4	470.3	483.1	494.9	507.8	522.2
160°	433.9	432.9	436.8	443.4	450.9	459.4	471.8	483.1	492.6	504.0	515.4
162.5°	440.7	439.8	443.5	449.4	455.5	462.5	473.3	482.4	490.3	499.5	509.3
165°	450.9	449.1	451.9	456.6	460.4	466.1	473.7	481.3	486.9	492.6	500.2
167.5°	457.8	456.8	458.5	461.1	463.8	467.4	473.7	479.0	481.6	486.0	491.3
170°	462.3	461.4	462.3	464.2	466.1	469.0	473.7	477.4	479.4	482.2	486.0
172.5°	465.4	463.7	464.6	466.4	467.6	469.0	472.9	476.0	476.3	477.7	480.7
175°	469.0	467.0	468.0	469.0	469.0	469.0	471.8	473.7	472.7	472.7	473.7
177.5°	470.7	469.1	469.1	469.9	469.1	469.1	470.7	471.4	469.9	469.9	470.7
180°	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	476.3	476.3	476.3	476.3	476.3	476.3	476.3	476.3
2.5°	474.9	475.6	476.2	476.5	476.5	476.4	476.4	476.3
5°	472.5	473.3	474.0	474.3	474.3	474.2	474.1	474.0
7.5°	467.7	468.5	469.2	469.5	469.4	469.4	469.3	469.2
10°	463.7	464.3	465.0	465.3	465.2	465.1	465.0	465.0
12.5°	458.3	458.9	459.3	459.6	459.6	459.6	459.6	459.5
15°	448.8	449.2	449.7	449.9	449.9	449.9	449.9	449.9
17.5°	437.9	438.4	439.0	439.0	438.5	438.1	437.7	437.3
20°	429.6	430.2	430.7	430.9	430.4	430.0	429.6	429.2
22.5°	420.1	420.5	420.9	420.9	420.7	420.4	420.1	419.8
25°	405.0	405.2	405.4	405.3	405.0	404.8	404.6	404.3
27.5°	389.1	389.1	389.2	389.1	388.8	388.6	388.3	388.1
30°	377.6	377.4	377.2	377.1	376.8	376.6	376.3	376.0
32.5°	365.9	365.6	365.3	364.9	364.4	363.9	363.5	363.1
35°	347.7	347.3	346.8	346.3	345.7	345.0	344.3	343.6
37.5°	328.6	328.0	327.3	326.9	326.4	326.1	325.7	325.3
40°	315.4	314.6	313.9	313.4	313.2	312.8	312.6	312.3
42.5°	302.2	301.6	300.8	300.4	299.9	299.5	299.2	298.8
45°	282.8	281.8	280.9	280.2	280.0	279.7	279.5	279.2
47.5°	262.4	261.4	260.3	259.5	258.9	258.4	257.8	257.2
50°	248.4	247.3	246.2	245.4	244.8	244.2	243.6	243.0
52.5°	234.8	233.8	232.8	232.1	231.5	230.8	230.2	229.5
55°	213.6	212.9	212.1	211.5	210.9	210.3	209.7	209.1
57.5°	192.7	191.7	190.7	190.0	189.7	189.4	189.1	188.7
60°	178.5	177.6	176.8	176.0	175.5	174.9	174.3	173.7
62.5°	164.8	163.8	162.9	162.2	161.8	161.3	160.9	160.5
65°	143.2	142.4	141.7	141.1	140.8	140.5	140.1	139.8
67.5°	122.6	122.0	121.3	120.9	120.7	120.5	120.3	120.1
70°	109.0	108.5	108.0	107.6	107.3	107.0	106.6	106.2
72.5°	96.2	95.6	95.1	94.7	94.3	94.0	93.6	93.3
75°	76.4	76.1	75.8	75.6	75.3	74.9	74.6	74.2
77.5°	58.2	58.0	57.9	57.7	57.5	57.2	57.0	56.7
80°	46.6	46.5	46.4	46.2	46.1	45.9	45.7	45.6
82.5°	35.5	35.4	35.3	35.1	35.1	35.1	35.1	35.1
85°	21.0	20.9	20.8	20.6	20.5	20.3	20.1	20.0
87.5°	11.3	11.4	11.7	11.9	11.8	11.7	11.7	11.6
90°	17.0	18.0	18.9	20.9	20.9	20.9	21.8	21.8
92.5°	167.9	121.8	91.7	77.7	65.6	63.3	62.0	60.4
95°	681.1	537.1	420.6	341.0	273.8	245.3	237.8	222.7
97.5°	1014.4	913.5	800.0	689.3	630.7	577.7	550.2	538.1
100°	1165.2	1118.8	1021.2	922.7	857.4	789.1	754.1	738.9
102.5°	1216.0	1244.6	1197.8	1131.1	1061.2	1012.7	974.6	963.3
105°	1186.1	1315.9	1357.6	1347.1	1316.8	1285.6	1266.6	1255.2
107.5°	1079.2	1252.4	1359.4	1408.9	1424.2	1424.1	1417.8	1410.2
110°	1000.4	1180.4	1313.9	1394.5	1437.1	1455.1	1461.8	1461.8





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	938.2	1109.1	1244.2	1339.1	1401.5	1432.4	1448.9	1455.7
115°	860.2	1007.1	1136.8	1240.1	1313.9	1359.4	1385.9	1398.2
117.5°	809.8	936.4	1048.1	1142.9	1216.8	1263.8	1290.1	1297.6
120°	782.5	896.2	1000.4	1083.8	1153.9	1199.3	1224.9	1232.5
122.5°	762.1	867.4	960.3	1038.3	1100.8	1142.5	1168.1	1174.9
125°	732.3	828.9	911.3	979.6	1032.6	1071.5	1092.3	1101.8
127.5°	702.0	792.1	869.1	932.9	981.0	1015.4	1035.1	1039.3
130°	683.1	766.4	840.3	901.9	949.3	980.5	999.5	1005.1
132.5°	664.1	742.2	809.2	868.5	915.9	947.1	964.6	971.0
135°	639.4	704.8	765.5	819.5	861.1	892.4	909.5	915.2
137.5°	618.6	671.5	721.9	767.8	805.0	833.5	849.2	855.4
140°	607.2	651.8	695.4	735.2	770.2	794.8	809.0	813.8
142.5°	597.4	635.1	672.6	707.1	736.9	757.7	771.1	775.1
145°	584.5	613.8	643.3	668.8	691.5	707.7	718.1	721.9
147.5°	572.4	596.2	618.8	638.1	656.2	669.0	675.1	676.8
150°	565.6	586.4	604.4	621.4	635.7	647.0	650.9	651.8
152.5°	558.0	576.6	593.0	606.3	618.2	627.3	631.1	632.1
155°	546.6	561.7	575.0	585.5	594.9	601.5	604.4	605.4
157.5°	535.2	547.7	558.0	566.1	573.5	579.0	581.6	581.5
160°	527.7	537.1	546.6	553.3	559.9	564.6	566.6	565.6
162.5°	519.3	528.1	536.0	541.8	547.0	551.0	551.4	551.1
165°	507.8	514.4	520.1	524.8	528.6	530.5	530.5	530.5
167.5°	496.8	501.2	505.5	508.9	510.8	512.5	511.8	511.6
170°	490.7	493.6	496.4	498.3	500.2	501.2	501.2	500.2
172.5°	483.9	486.7	488.9	490.0	490.3	492.0	490.6	489.6
175°	476.5	476.5	478.4	478.4	478.4	479.4	477.4	476.5
177.5°	471.4	472.1	472.1	472.1	471.4	472.1	469.9	469.9
180°	469.9	469.9	469.9	469.9	469.9	469.9	469.9	469.9

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