

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: P333148-840

Luminaire Tested: **S125DIP-S375D1035U840-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333148-840
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-7,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125DIP-S375D1035U840-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1035 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5714.9 lumens
Efficiency: N/A
Efficacy: 153.2 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

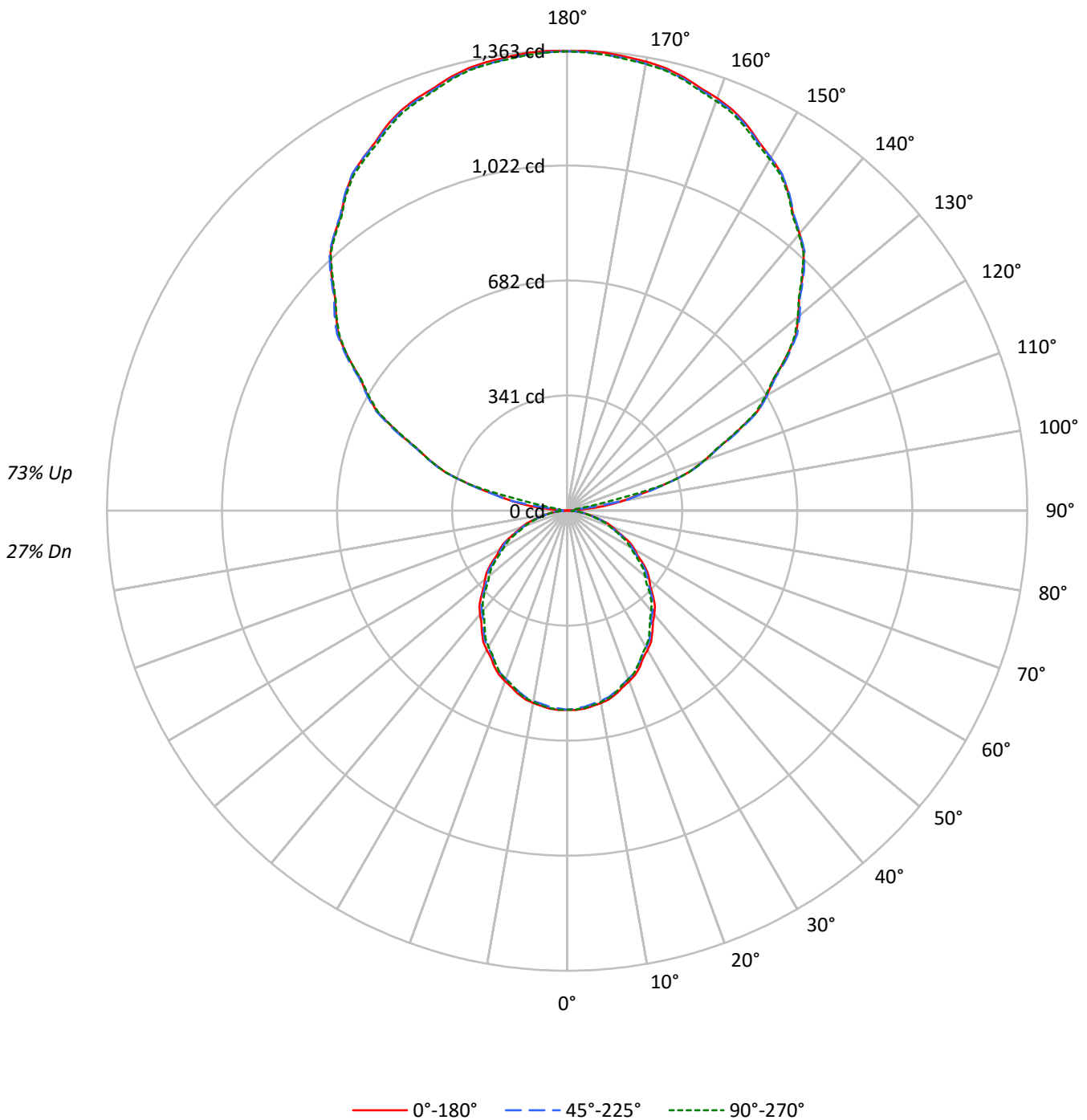
Input Watts (W): 37.3
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	71	71	71	52	52	52	35	35	35	27
1	93	88	85	81	83	79	76	73	62	59	58	46	44	43	31	30	29	23
2	84	77	71	66	75	69	64	60	54	50	48	40	38	36	27	26	25	19
3	77	68	61	55	68	61	55	50	47	43	40	35	33	30	24	22	21	16
4	70	60	52	46	62	54	47	42	42	37	34	31	28	26	21	20	18	14
5	64	53	45	40	57	48	41	36	38	33	29	28	25	22	19	17	16	12
6	59	47	40	34	53	43	36	31	34	29	25	25	22	19	17	15	14	10
7	54	43	35	30	49	38	32	27	30	26	22	23	20	17	16	14	12	9
8	50	39	31	26	45	35	28	24	28	23	19	21	18	15	15	12	11	8
9	47	35	28	23	42	32	25	21	25	21	17	19	16	14	13	11	10	7
10	44	32	25	20	39	29	23	19	23	19	15	18	14	12	12	10	9	7

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3810	3810	3810
5°	3818	3782	3806
10°	3796	3756	3777
15°	3754	3710	3726
20°	3696	3647	3654
25°	3632	3572	3569
30°	3554	3491	3473
35°	3470	3404	3356
40°	3384	3309	3262
45°	3291	3222	3159
50°	3189	3118	3024
55°	3090	3001	2916
60°	2971	2882	2780
65°	2832	2740	2647
70°	2696	2574	2485
75°	2458	2376	2293
80°	2187	2153	2101
85°	1904	1941	1830



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	55.6	1.0
10°-20°	157.1	2.7
20°-30°	232.0	4.1
30°-40°	270.7	4.7
40°-50°	271.9	4.8
50°-60°	238.7	4.2
60°-70°	177.8	3.1
70°-80°	101.7	1.8
80°-90°	32.4	0.6
90°-100°	49.4	0.9
100°-110°	304.6	5.3
110°-120°	552.5	9.7
120°-130°	709.1	12.4
130°-140°	762.7	13.3
140°-150°	715.9	12.5
150°-160°	579.1	10.1
160°-170°	374.5	6.6
170°-180°	129.2	2.3
0°-30°	444.7	7.8
0°-40°	715.5	12.5
0°-60°	1226.0	21.5
0°-90°	1537.9	26.9
90°-120°	906.6	15.9
90°-150°	3094.2	54.1
90°-180°	4177.0	73.1
0°-180°	5714.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	590	590	590	590	590	
5°	589	588	583	587	587	56
15°	562	560	555	557	557	158
25°	510	507	501	502	501	234
35°	440	438	432	429	426	275
45°	360	358	353	348	346	278
55°	274	273	266	262	259	245
65°	185	184	179	175	173	184
75°	98	98	95	94	92	105
85°	26	26	26	26	25	29
90°	1	9	16	21	24	4
95°	58	52	16	21	21	73
105°	296	300	300	300	299	314
115°	557	561	563	559	553	552
125°	792	798	799	795	792	707
135°	987	993	991	989	983	761
145°	1144	1146	1146	1147	1142	715
155°	1260	1255	1256	1259	1251	580
165°	1330	1324	1325	1330	1323	376
175°	1360	1355	1355	1362	1354	129
180°	1360	1360	1360	1360	1360	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0
2.5°	591.4	591.2	591.0	590.7	590.5	589.9	589.1	588.2	587.4	586.5	587.4
5°	589.0	588.8	588.5	588.3	588.1	587.5	586.5	585.5	584.4	583.4	584.3
7.5°	583.6	583.4	583.2	583.0	582.8	582.1	581.0	579.8	578.7	577.5	578.5
10°	578.8	578.6	578.3	578.1	577.9	577.2	576.1	574.9	573.8	572.7	573.5
12.5°	572.8	572.4	572.0	571.7	571.3	570.6	569.5	568.5	567.3	566.3	566.9
15°	561.5	561.2	560.9	560.6	560.2	559.5	558.4	557.2	556.0	554.9	555.4
17.5°	548.5	548.1	547.5	547.1	546.6	545.8	544.6	543.5	542.3	541.1	541.8
20°	537.7	537.5	537.2	537.0	536.8	536.0	534.7	533.3	532.0	530.7	531.4
22.5°	526.8	526.4	526.0	525.7	525.3	524.5	523.2	522.0	520.7	519.5	520.0
25°	509.7	509.2	508.6	508.1	507.6	506.6	505.3	503.9	502.6	501.3	501.5
27.5°	489.6	489.3	489.0	488.7	488.4	487.5	486.1	484.7	483.3	481.9	482.0
30°	476.6	476.3	475.8	475.5	475.2	474.3	472.8	471.2	469.7	468.1	467.9
32.5°	462.3	461.8	461.4	460.9	460.4	459.5	458.1	456.7	455.3	453.9	453.5
35°	440.1	439.7	439.3	438.9	438.5	437.5	436.1	434.6	433.1	431.7	431.2
37.5°	417.1	416.6	416.1	415.5	415.0	414.0	412.6	411.3	409.9	408.6	407.8
40°	401.4	400.8	400.3	399.8	399.3	398.3	396.9	395.5	393.9	392.5	391.6
42.5°	384.6	384.2	383.7	383.2	382.8	381.9	380.4	379.0	377.5	376.1	375.3
45°	360.3	359.9	359.5	359.1	358.6	357.8	356.6	355.4	354.1	352.8	351.6
47.5°	334.2	334.2	334.2	334.3	334.3	333.6	332.0	330.5	329.0	327.5	326.3
50°	317.4	317.1	316.8	316.4	316.1	315.4	314.1	312.9	311.6	310.3	309.0
52.5°	300.2	299.9	299.7	299.5	299.3	298.5	297.2	295.9	294.5	293.2	292.1
55°	274.4	274.1	273.8	273.5	273.2	272.3	270.8	269.4	267.9	266.5	265.6
57.5°	247.3	247.1	246.9	246.8	246.6	245.9	244.7	243.5	242.3	241.1	239.8
60°	230.0	229.6	229.2	228.8	228.4	227.6	226.5	225.4	224.2	223.1	222.1
62.5°	212.2	211.9	211.5	211.2	210.9	210.2	209.2	208.2	207.2	206.3	205.2
65°	185.3	185.1	184.9	184.7	184.5	183.8	182.7	181.5	180.4	179.3	178.2
67.5°	159.3	158.9	158.3	157.9	157.5	156.8	156.0	155.1	154.3	153.5	152.7
70°	142.8	142.3	141.8	141.3	140.8	140.0	139.1	138.1	137.2	136.3	135.6
72.5°	124.9	124.5	124.2	123.8	123.5	123.0	122.4	121.8	121.2	120.6	119.9
75°	98.5	98.3	98.1	97.9	97.7	97.3	96.7	96.2	95.7	95.2	94.9
77.5°	74.1	74.0	73.9	73.8	73.8	73.6	73.3	73.0	72.7	72.4	72.2
80°	58.8	58.8	58.8	58.8	58.8	58.7	58.5	58.3	58.1	57.9	57.8
82.5°	45.3	45.2	45.0	44.8	44.7	44.6	44.5	44.5	44.4	44.4	44.2
85°	25.7	25.8	25.9	26.0	26.1	26.2	26.2	26.2	26.2	26.2	26.1
87.5°	10.3	10.6	11.0	11.3	11.7	12.0	12.2	12.5	12.7	12.9	13.1
90°	1.0	2.8	4.5	6.4	8.2	9.9	11.4	13.0	14.5	16.2	17.3
92.5°	15.6	14.2	13.0	11.7	10.5	10.6	11.9	13.3	14.7	16.2	17.3
95°	57.5	56.8	56.1	55.4	54.8	50.2	41.7	33.1	24.6	16.2	17.3
97.5°	120.0	121.2	122.4	123.6	124.8	117.0	100.2	83.3	66.4	49.6	43.3
100°	168.3	169.1	169.8	170.4	171.1	171.9	172.8	173.7	174.5	175.4	142.1
102.5°	217.6	218.4	219.3	220.2	221.0	221.7	222.3	222.8	223.3	223.9	217.5
105°	296.4	297.3	298.2	299.1	300.0	300.4	300.4	300.4	300.4	300.4	300.4
107.5°	378.3	378.3	378.3	378.3	378.3	378.5	379.0	379.4	379.9	380.3	380.4
110°	431.5	431.5	431.5	431.5	431.5	431.8	432.2	432.7	433.1	433.5	432.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	481.6	482.1	482.6	483.2	483.7	484.1	484.4	484.6	484.9	485.2	484.3
115°	556.6	557.7	558.9	560.0	561.1	561.8	562.0	562.2	562.4	562.6	561.8
117.5°	634.2	634.2	634.1	634.1	634.1	634.5	635.3	636.1	637.0	637.8	636.7
120°	682.7	682.4	682.2	682.0	681.8	682.0	682.7	683.3	684.0	684.7	684.2
122.5°	725.4	726.2	727.1	727.9	728.8	729.3	729.7	730.0	730.3	730.6	730.1
125°	791.5	793.0	794.7	796.3	797.8	798.6	798.6	798.6	798.6	798.6	797.7
127.5°	854.6	855.8	856.9	858.0	859.1	859.6	859.5	859.4	859.2	859.1	858.6
130°	893.3	894.5	895.6	896.8	897.9	898.5	898.8	899.0	899.2	899.4	898.8
132.5°	932.1	933.4	934.7	935.9	937.3	937.7	937.2	936.8	936.2	935.7	935.5
135°	987.1	988.5	989.9	991.2	992.5	993.0	992.5	992.1	991.6	991.2	990.7
137.5°	1037.7	1038.9	1040.1	1041.3	1042.4	1042.8	1042.4	1042.0	1041.6	1041.2	1041.3
140°	1070.9	1071.3	1071.8	1072.2	1072.6	1072.8	1072.5	1072.3	1072.1	1071.9	1072.3
142.5°	1100.7	1101.0	1101.3	1101.5	1101.8	1102.1	1102.4	1102.7	1103.0	1103.3	1103.4
145°	1144.5	1144.9	1145.3	1145.8	1146.2	1146.5	1146.5	1146.5	1146.5	1146.5	1146.7
147.5°	1182.8	1182.7	1182.6	1182.5	1182.3	1182.5	1182.8	1183.1	1183.3	1183.6	1183.9
150°	1207.0	1206.5	1206.1	1205.6	1205.2	1205.2	1205.6	1206.1	1206.5	1207.0	1207.4
152.5°	1230.3	1229.4	1228.4	1227.4	1226.4	1226.2	1226.6	1227.0	1227.5	1227.9	1228.4
155°	1260.4	1259.1	1257.7	1256.4	1255.1	1254.6	1255.1	1255.5	1255.9	1256.4	1257.1
157.5°	1283.5	1282.7	1282.0	1281.2	1280.4	1280.0	1280.0	1280.1	1280.1	1280.2	1280.9
160°	1299.7	1298.4	1297.1	1295.7	1294.3	1293.7	1294.0	1294.2	1294.4	1294.6	1295.6
162.5°	1312.6	1311.3	1309.9	1308.6	1307.3	1306.7	1306.9	1307.2	1307.4	1307.6	1308.9
165°	1330.0	1328.6	1327.3	1326.0	1324.6	1324.0	1324.2	1324.4	1324.7	1324.9	1326.3
167.5°	1342.9	1341.5	1340.1	1338.7	1337.4	1336.8	1337.0	1337.2	1337.4	1337.7	1339.3
170°	1350.1	1348.6	1347.0	1345.4	1343.8	1343.2	1343.4	1343.6	1343.8	1344.1	1345.8
172.5°	1354.9	1353.4	1351.8	1350.3	1348.7	1348.2	1348.5	1348.9	1349.3	1349.7	1351.3
175°	1360.2	1358.9	1357.6	1356.1	1354.8	1354.3	1354.5	1354.7	1354.9	1355.1	1357.0
177.5°	1362.6	1361.6	1360.5	1359.4	1358.4	1357.9	1358.1	1358.3	1358.5	1358.6	1359.9
180°	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	590.0	590.0	590.0	590.0	590.0	590.0	590.0	590.0
2.5°	588.2	589.1	589.9	590.3	590.2	590.1	590.1	590.0
5°	585.2	586.2	587.1	587.5	587.4	587.3	587.2	587.1
7.5°	579.4	580.3	581.2	581.6	581.5	581.4	581.3	581.2
10°	574.3	575.1	576.0	576.3	576.2	576.1	576.0	575.9
12.5°	567.6	568.4	569.0	569.3	569.3	569.3	569.3	569.2
15°	555.9	556.4	557.0	557.2	557.2	557.2	557.2	557.2
17.5°	542.4	543.0	543.7	543.7	543.2	542.7	542.2	541.7
20°	532.1	532.8	533.5	533.7	533.1	532.6	532.1	531.6
22.5°	520.4	520.9	521.4	521.4	521.1	520.7	520.4	520.0
25°	501.7	501.9	502.1	502.0	501.7	501.4	501.1	500.8
27.5°	482.0	482.0	482.1	482.0	481.6	481.3	481.0	480.7
30°	467.7	467.5	467.3	467.1	466.8	466.5	466.1	465.7
32.5°	453.2	452.8	452.4	452.0	451.4	450.8	450.3	449.7
35°	430.7	430.2	429.6	429.0	428.2	427.3	426.5	425.7
37.5°	407.1	406.3	405.5	404.9	404.3	403.9	403.4	402.9
40°	390.6	389.7	388.8	388.2	387.9	387.5	387.2	386.9
42.5°	374.4	373.5	372.6	372.0	371.5	371.0	370.6	370.1
45°	350.3	349.1	347.9	347.1	346.8	346.5	346.2	345.9
47.5°	325.0	323.8	322.4	321.4	320.7	320.0	319.3	318.6
50°	307.7	306.3	305.0	304.0	303.2	302.5	301.7	301.0
52.5°	290.8	289.6	288.4	287.5	286.7	285.9	285.1	284.3
55°	264.6	263.7	262.8	262.0	261.3	260.4	259.7	259.0
57.5°	238.6	237.4	236.2	235.4	235.0	234.6	234.2	233.8
60°	221.1	219.9	218.9	218.0	217.3	216.6	215.9	215.2
62.5°	204.1	202.9	201.8	201.0	200.5	199.9	199.2	198.7
65°	177.3	176.4	175.5	174.8	174.4	174.0	173.6	173.2
67.5°	151.9	151.1	150.3	149.8	149.6	149.3	149.1	148.8
70°	135.0	134.4	133.8	133.3	132.9	132.5	132.0	131.6
72.5°	119.2	118.5	117.8	117.2	116.8	116.4	115.9	115.5
75°	94.6	94.3	93.9	93.6	93.2	92.8	92.4	91.9
77.5°	72.1	71.9	71.7	71.5	71.2	70.9	70.6	70.3
80°	57.7	57.6	57.5	57.3	57.1	56.9	56.7	56.5
82.5°	44.0	43.8	43.7	43.5	43.5	43.5	43.4	43.4
85°	26.0	25.9	25.8	25.5	25.3	25.1	24.9	24.7
87.5°	13.4	13.6	13.8	13.9	13.9	13.8	13.8	13.8
90°	18.4	19.5	20.6	21.5	22.2	22.8	23.5	24.2
92.5°	18.4	19.5	20.6	21.3	21.6	21.9	22.3	22.6
95°	18.4	19.5	20.6	21.2	21.2	21.2	21.2	21.2
97.5°	37.0	30.7	24.3	21.2	21.2	21.2	21.2	21.2
100°	108.7	75.3	41.9	24.7	23.8	22.9	22.1	21.2
102.5°	211.2	204.9	198.5	187.8	172.6	157.3	142.1	126.8
105°	300.4	300.4	300.4	300.3	300.1	299.9	299.7	299.4
107.5°	380.4	380.5	380.5	380.2	379.5	378.9	378.2	377.5
110°	432.2	431.5	430.9	430.7	430.9	431.1	431.3	431.5



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	483.5	482.6	481.8	481.2	480.9	480.6	480.3	480.0
115°	560.9	560.0	559.1	558.0	556.6	555.2	553.9	552.6
117.5°	635.5	634.4	633.2	632.3	631.8	631.2	630.6	630.0
120°	683.8	683.3	682.9	682.1	681.0	679.8	678.7	677.6
122.5°	729.7	729.3	728.8	727.9	726.7	725.4	724.1	722.8
125°	796.8	795.9	795.0	794.3	793.6	792.8	792.2	791.5
127.5°	858.1	857.6	857.1	856.1	854.3	852.7	851.1	849.4
130°	898.1	897.4	896.8	895.9	894.7	893.6	892.5	891.3
132.5°	935.4	935.3	935.1	934.5	933.4	932.3	931.2	930.1
135°	990.3	989.9	989.4	988.5	987.1	985.8	984.4	983.1
137.5°	1041.4	1041.5	1041.6	1041.0	1039.9	1038.6	1037.5	1036.3
140°	1072.8	1073.2	1073.6	1073.2	1071.9	1070.5	1069.1	1067.8
142.5°	1103.5	1103.6	1103.7	1103.1	1101.7	1100.3	1099.0	1097.6
145°	1146.9	1147.1	1147.3	1146.8	1145.5	1144.1	1142.8	1141.5
147.5°	1184.1	1184.4	1184.7	1184.0	1182.3	1180.7	1179.1	1177.5
150°	1207.9	1208.3	1208.7	1208.1	1206.3	1204.5	1202.6	1200.9
152.5°	1228.8	1229.3	1229.7	1229.1	1227.5	1225.9	1224.3	1222.6
155°	1257.7	1258.4	1259.1	1258.5	1256.7	1254.9	1253.1	1251.3
157.5°	1281.6	1282.3	1283.0	1282.5	1280.7	1278.9	1277.1	1275.4
160°	1296.5	1297.4	1298.3	1297.8	1296.1	1294.2	1292.4	1290.6
162.5°	1310.1	1311.3	1312.6	1312.2	1310.3	1308.3	1306.4	1304.3
165°	1327.6	1329.0	1330.3	1330.1	1328.3	1326.5	1324.7	1322.9
167.5°	1340.9	1342.5	1344.1	1343.9	1341.9	1339.9	1337.9	1335.8
170°	1347.7	1349.5	1351.3	1351.1	1349.1	1347.2	1345.1	1343.1
172.5°	1352.9	1354.5	1356.1	1355.9	1353.9	1351.9	1349.9	1348.0
175°	1358.8	1360.6	1362.3	1362.2	1360.2	1358.2	1356.1	1354.1
177.5°	1361.1	1362.4	1363.6	1363.5	1362.1	1360.7	1359.3	1357.8
180°	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2	1360.2

(END OF REPORT)