

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: P333655-830

Luminaire Tested: **S125RDIW-S375D1340U830-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333655-830
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-11,
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125RDIW-S375D1340U830-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED
HOUSING
UPLIGHT 1340 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5749.9 lumens
Efficiency: N/A
Efficacy: 123.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Semi-Indirect

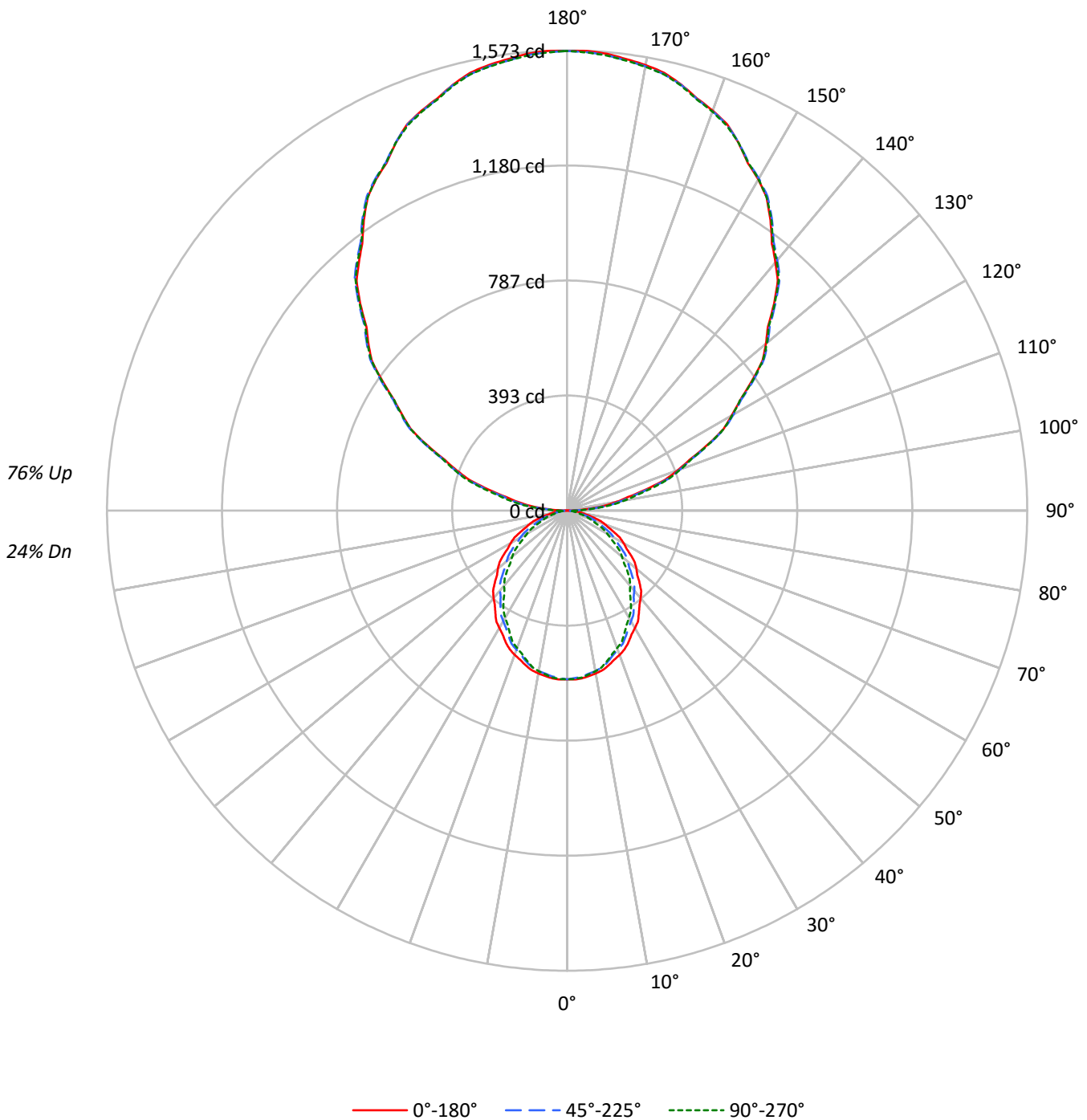
Input Watts (W): 46.6
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	101	101	101	101	90	90	90	90	69	69	69	50	50	50	32	32	32	24
1	92	88	84	81	82	78	75	72	60	58	56	44	42	41	28	28	27	20
2	84	77	71	66	74	68	64	60	53	50	47	38	36	35	25	24	23	17
3	76	67	61	55	68	60	54	50	47	43	39	34	31	29	22	21	20	15
4	70	60	52	46	62	53	47	42	41	37	33	30	27	25	20	18	17	13
5	64	53	45	40	57	47	41	36	37	32	29	27	24	22	18	16	15	11
6	59	47	40	34	52	42	36	31	33	28	25	24	21	19	16	14	13	10
7	54	43	35	30	48	38	32	27	30	25	22	22	19	17	15	13	12	9
8	50	39	31	26	45	35	28	24	27	23	19	20	17	15	14	12	10	8
9	47	35	28	23	41	32	25	21	25	20	17	19	15	13	13	11	9	7
10	43	32	25	21	39	29	23	19	23	18	15	17	14	12	12	10	8	6

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3725	3725	3725
5°	3734	3691	3713
10°	3705	3657	3657
15°	3661	3582	3553
20°	3604	3478	3437
25°	3539	3377	3302
30°	3456	3258	3155
35°	3372	3136	2988
40°	3295	3008	2824
45°	3199	2865	2645
50°	3104	2710	2460
55°	2992	2559	2262
60°	2880	2381	2047
65°	2749	2170	1803
70°	2598	1907	1554
75°	2393	1609	1293
80°	2105	1261	1086
85°	1771	1030	971



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	54.2	0.9
10°-20°	151.6	2.6
20°-30°	219.8	3.8
30°-40°	250.5	4.4
40°-50°	244.1	4.2
50°-60°	205.5	3.6
60°-70°	144.1	2.5
70°-80°	74.1	1.3
80°-90°	22.1	0.4
90°-100°	105.2	1.8
100°-110°	310.7	5.4
110°-120°	526.3	9.2
120°-130°	692.7	12.0
130°-140°	776.1	13.5
140°-150°	760.7	13.2
150°-160°	638.9	11.1
160°-170°	424.7	7.4
170°-180°	148.6	2.6
0°-30°	425.6	7.4
0°-40°	676.0	11.8
0°-60°	1125.7	19.6
0°-90°	1366.0	23.8
90°-120°	942.3	16.4
90°-150°	3171.8	55.2
90°-180°	4384.0	76.2
0°-180°	5749.9	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	577	577	577	577	577	
5°	576	574	569	573	573	55
15°	548	545	536	535	531	154
25°	497	490	474	468	463	228
35°	428	417	398	385	379	268
45°	350	337	314	297	290	270
55°	266	251	227	208	201	238
65°	180	165	142	125	118	178
75°	96	83	64	55	52	101
85°	24	16	14	14	13	27
90°	1	11	20	26	29	6
95°	80	82	94	102	105	85
105°	279	285	292	299	303	298
115°	527	532	534	533	532	521
125°	769	776	778	775	774	688
135°	1000	1007	1009	1008	1004	771
145°	1212	1216	1220	1220	1216	757
155°	1386	1387	1388	1392	1386	638
165°	1508	1505	1506	1510	1504	425
175°	1567	1563	1562	1569	1561	149
180°	1571	1571	1571	1571	1571	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7
2.5°	577.8	577.6	577.3	577.1	576.8	576.4	575.6	574.8	574.0	573.3	574.0
5°	575.9	575.5	575.1	574.7	574.3	573.6	572.5	571.5	570.4	569.3	570.3
7.5°	570.2	569.9	569.5	569.1	568.7	567.9	566.7	565.3	564.1	562.8	563.5
10°	565.0	564.7	564.4	564.1	563.8	563.0	561.7	560.2	558.9	557.6	557.9
12.5°	559.0	558.6	558.4	558.0	557.6	556.5	554.7	552.9	551.0	549.2	549.4
15°	547.5	547.0	546.4	545.8	545.3	543.9	541.9	539.9	537.8	535.8	535.7
17.5°	534.6	533.7	532.8	531.9	531.0	529.3	526.7	524.1	521.6	519.1	518.6
20°	524.4	523.5	522.5	521.6	520.6	518.6	515.5	512.4	509.3	506.1	505.7
22.5°	513.3	512.4	511.4	510.4	509.4	507.4	504.1	500.9	497.6	494.4	493.4
25°	496.6	495.1	493.7	492.2	490.8	488.2	484.7	481.1	477.5	473.9	472.7
27.5°	477.4	475.7	473.9	472.1	470.3	467.6	463.7	459.9	456.1	452.2	450.4
30°	463.4	461.7	459.8	458.0	456.1	453.2	449.1	445.1	441.0	436.9	434.7
32.5°	449.9	447.7	445.6	443.5	441.3	438.2	434.0	429.9	425.7	421.6	419.1
35°	427.7	425.5	423.1	420.8	418.5	415.1	410.8	406.4	402.1	397.8	394.9
37.5°	406.0	403.2	400.4	397.6	394.7	391.1	386.6	382.1	377.7	373.2	369.8
40°	390.8	387.9	384.9	382.0	379.1	375.3	370.7	366.1	361.4	356.8	353.1
42.5°	374.7	371.7	368.7	365.8	362.8	358.9	354.1	349.3	344.5	339.7	336.2
45°	350.2	347.4	344.6	341.8	339.0	334.9	329.6	324.3	319.0	313.7	309.7
47.5°	324.9	321.9	319.0	315.9	313.0	308.9	303.5	298.1	292.8	287.4	283.4
50°	308.9	305.7	302.5	299.3	296.1	291.7	286.2	280.7	275.1	269.7	265.6
52.5°	291.4	288.1	284.8	281.6	278.3	274.1	268.9	263.6	258.4	253.3	248.9
55°	265.7	262.6	259.5	256.5	253.4	249.1	243.6	238.2	232.8	227.3	223.0
57.5°	239.8	236.5	233.1	229.8	226.5	222.3	217.0	211.8	206.6	201.3	197.1
60°	223.0	219.6	216.2	212.8	209.4	205.2	199.9	194.7	189.5	184.3	180.0
62.5°	205.3	202.0	198.8	195.6	192.3	188.0	182.8	177.5	172.1	166.8	162.9
65°	179.9	176.6	173.3	170.0	166.7	162.5	157.4	152.3	147.1	142.0	138.2
67.5°	154.8	151.5	148.2	144.9	141.6	137.4	132.5	127.6	122.7	117.8	114.2
70°	137.6	134.4	131.1	127.8	124.5	120.5	115.6	110.7	105.9	101.0	98.0
72.5°	120.9	117.7	114.5	111.3	108.1	104.2	99.6	95.1	90.6	86.1	83.3
75°	95.9	92.9	90.0	87.1	84.3	80.8	76.6	72.6	68.5	64.5	62.3
77.5°	70.9	68.6	66.3	63.9	61.6	58.8	55.6	52.3	49.1	45.8	44.3
80°	56.6	54.3	52.0	49.7	47.3	44.9	42.1	39.4	36.7	33.9	33.1
82.5°	42.7	40.6	38.5	36.4	34.3	32.3	30.5	28.7	26.8	24.9	24.5
85°	23.9	22.2	20.5	18.8	17.0	15.8	15.4	14.9	14.4	13.9	13.9
87.5°	8.3	8.1	8.0	7.9	7.8	7.9	8.2	8.6	8.9	9.1	9.4
90°	1.2	3.4	5.6	7.7	9.9	12.0	13.9	15.7	17.6	19.6	20.9
92.5°	29.6	31.1	32.6	34.1	35.6	37.6	40.0	42.3	44.6	46.9	48.7
95°	79.5	80.0	80.6	81.1	81.6	83.3	86.0	88.7	91.4	94.2	96.0
97.5°	132.1	132.2	132.5	132.7	132.9	134.9	138.6	142.4	146.2	149.9	151.7
100°	171.2	171.2	171.2	171.2	171.2	173.0	176.4	180.0	183.5	187.1	189.5
102.5°	213.2	214.3	215.4	216.5	217.5	219.0	220.8	222.6	224.4	226.2	228.8
105°	278.8	280.1	281.4	282.9	284.2	285.7	287.3	289.0	290.6	292.2	293.9
107.5°	351.1	352.5	353.8	355.2	356.6	357.9	359.1	360.3	361.7	362.9	363.7
110°	401.1	402.4	403.8	405.1	406.4	407.6	408.4	409.2	410.0	410.8	411.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	451.9	452.6	453.3	454.0	454.7	455.6	456.6	457.6	458.6	459.7	460.1
115°	527.0	528.0	529.1	530.2	531.3	532.2	532.6	533.2	533.8	534.3	534.0
117.5°	602.3	602.8	603.2	603.7	604.3	604.7	605.2	605.7	606.1	606.7	606.9
120°	649.2	650.5	652.0	653.3	654.7	655.4	655.7	656.0	656.3	656.6	656.6
122.5°	700.1	700.6	701.1	701.5	702.0	702.7	703.3	704.1	704.7	705.5	705.2
125°	769.0	770.6	772.3	773.9	775.5	776.5	776.7	777.0	777.3	777.6	777.0
127.5°	842.4	843.3	844.2	845.2	846.1	846.7	847.1	847.3	847.7	848.0	847.7
130°	886.4	887.8	889.1	890.5	891.8	892.8	893.3	893.9	894.4	894.9	894.7
132.5°	930.4	932.6	934.9	937.1	939.3	940.4	940.3	940.2	940.1	940.0	939.7
135°	1000.1	1001.7	1003.3	1005.0	1006.6	1007.6	1007.9	1008.1	1008.4	1008.7	1008.7
137.5°	1065.6	1067.2	1068.8	1070.4	1072.0	1073.0	1073.7	1074.2	1074.9	1075.4	1075.7
140°	1107.7	1109.1	1110.4	1111.8	1113.1	1114.2	1115.0	1115.9	1116.6	1117.5	1118.0
142.5°	1149.8	1150.9	1152.1	1153.2	1154.3	1155.4	1156.4	1157.4	1158.5	1159.5	1159.9
145°	1211.6	1212.7	1213.8	1214.8	1216.0	1216.9	1217.8	1218.5	1219.4	1220.2	1220.2
147.5°	1268.9	1269.4	1270.1	1270.6	1271.2	1271.9	1272.5	1273.2	1273.8	1274.5	1275.2
150°	1307.0	1306.7	1306.5	1306.2	1305.9	1306.3	1307.4	1308.5	1309.6	1310.7	1310.7
152.5°	1338.3	1338.7	1339.1	1339.4	1339.8	1340.2	1340.7	1341.0	1341.5	1342.0	1342.7
155°	1386.5	1386.5	1386.5	1386.5	1386.5	1386.6	1386.9	1387.1	1387.4	1387.7	1388.7
157.5°	1429.5	1428.9	1428.3	1427.7	1427.1	1426.9	1427.2	1427.5	1427.8	1428.0	1429.1
160°	1454.9	1454.2	1453.3	1452.5	1451.7	1451.4	1451.7	1452.0	1452.2	1452.5	1453.6
162.5°	1477.4	1476.9	1476.2	1475.6	1475.1	1474.8	1474.8	1474.9	1474.9	1475.0	1476.3
165°	1507.5	1506.9	1506.4	1505.9	1505.3	1505.2	1505.4	1505.7	1506.0	1506.3	1507.4
167.5°	1533.0	1531.8	1530.8	1529.7	1528.6	1528.0	1528.0	1528.0	1528.0	1528.0	1529.7
170°	1546.6	1545.6	1544.5	1543.4	1542.3	1541.7	1541.7	1541.7	1541.7	1541.7	1543.4
172.5°	1556.4	1555.3	1554.3	1553.1	1552.1	1551.5	1551.5	1551.5	1551.5	1551.5	1553.1
175°	1567.4	1566.3	1565.3	1564.1	1563.1	1562.5	1562.5	1562.5	1562.5	1562.5	1564.1
177.5°	1573.0	1572.2	1571.3	1570.5	1569.5	1569.1	1568.8	1568.6	1568.4	1568.1	1569.4
180°	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	576.7	576.7	576.7	576.7	576.7	576.7	576.7	576.7
2.5°	574.8	575.6	576.4	576.7	576.6	576.6	576.5	576.4
5°	571.3	572.2	573.2	573.6	573.4	573.2	573.0	572.8
7.5°	564.1	564.9	565.5	565.7	565.5	565.3	565.1	564.9
10°	558.2	558.5	558.7	558.7	558.5	558.2	557.9	557.6
12.5°	549.6	549.9	550.1	550.0	549.5	549.0	548.7	548.2
15°	535.6	535.5	535.4	534.9	534.0	533.2	532.3	531.4
17.5°	518.1	517.6	517.2	516.5	515.9	515.1	514.3	513.7
20°	505.2	504.7	504.3	503.6	502.7	501.8	501.0	500.1
22.5°	492.4	491.4	490.5	489.7	489.0	488.2	487.6	486.8
25°	471.5	470.1	468.9	467.8	466.7	465.6	464.6	463.4
27.5°	448.7	447.0	445.2	443.8	442.8	441.8	440.7	439.7
30°	432.4	430.3	428.0	426.5	425.6	424.7	423.9	423.0
32.5°	416.7	414.2	411.7	410.0	408.9	407.7	406.6	405.6
35°	392.1	389.3	386.4	384.4	383.0	381.7	380.3	379.0
37.5°	366.4	363.1	359.7	357.3	356.0	354.7	353.4	352.0
40°	349.4	345.7	342.0	339.6	338.5	337.3	336.1	335.0
42.5°	332.6	329.1	325.6	323.0	321.3	319.5	317.8	316.1
45°	305.9	302.0	298.1	295.5	294.1	292.6	291.2	289.6
47.5°	279.5	275.4	271.5	268.6	267.0	265.4	263.8	262.2
50°	261.5	257.4	253.4	250.6	249.2	247.7	246.3	244.8
52.5°	244.5	240.2	235.7	232.8	231.4	230.0	228.5	227.1
55°	218.7	214.3	210.0	207.0	205.5	203.9	202.4	200.9
57.5°	192.8	188.6	184.3	181.4	180.1	178.7	177.4	176.0
60°	175.8	171.4	167.2	164.4	162.9	161.5	160.0	158.5
62.5°	158.9	155.0	151.0	148.4	146.8	145.4	144.0	142.5
65°	134.2	130.4	126.5	123.9	122.4	120.9	119.5	118.0
67.5°	110.7	107.2	103.6	101.2	100.1	99.0	97.7	96.6
70°	95.1	92.1	89.1	87.0	85.8	84.6	83.5	82.3
72.5°	80.5	77.8	75.0	73.2	72.5	71.7	70.9	70.1
75°	60.2	58.1	56.0	54.6	53.9	53.2	52.5	51.8
77.5°	42.9	41.4	39.9	38.8	38.4	37.9	37.3	36.9
80°	32.2	31.4	30.5	30.0	29.8	29.6	29.4	29.2
82.5°	24.1	23.7	23.3	23.0	22.9	22.8	22.7	22.5
85°	13.8	13.7	13.6	13.5	13.4	13.3	13.2	13.1
87.5°	9.7	10.0	10.2	10.4	10.5	10.6	10.7	10.7
90°	22.2	23.7	25.0	26.1	26.9	27.7	28.6	29.3
92.5°	50.5	52.3	54.1	55.3	55.9	56.6	57.1	57.7
95°	97.9	99.8	101.8	102.9	103.5	104.1	104.6	105.2
97.5°	153.4	155.2	157.0	158.2	158.4	158.8	159.1	159.5
100°	192.0	194.4	196.8	198.3	198.9	199.4	200.0	200.5
102.5°	231.5	234.1	236.9	238.6	239.3	240.1	240.8	241.6
105°	295.5	297.1	298.7	299.9	300.8	301.6	302.4	303.2
107.5°	364.5	365.3	366.2	366.6	366.5	366.4	366.4	366.3
110°	412.5	413.2	414.1	414.3	414.1	413.8	413.5	413.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	460.4	460.8	461.2	461.2	460.7	460.2	459.7	459.2
115°	533.8	533.5	533.2	532.9	532.6	532.3	532.2	531.9
117.5°	607.1	607.3	607.6	607.1	606.1	604.9	603.9	602.8
120°	656.6	656.6	656.6	656.0	654.9	653.8	652.7	651.7
122.5°	705.0	704.8	704.6	704.1	703.1	702.3	701.4	700.6
125°	776.5	776.0	775.4	775.1	774.8	774.5	774.2	773.9
127.5°	847.4	847.2	847.0	846.5	846.0	845.5	844.9	844.3
130°	894.4	894.2	893.9	893.4	893.0	892.4	891.8	891.3
132.5°	939.4	939.1	938.9	938.4	937.6	936.8	936.0	935.3
135°	1008.7	1008.7	1008.7	1008.1	1007.0	1006.0	1004.8	1003.8
137.5°	1076.1	1076.4	1076.8	1076.2	1074.9	1073.5	1072.1	1070.8
140°	1118.6	1119.1	1119.6	1119.3	1117.9	1116.5	1115.2	1113.8
142.5°	1160.2	1160.6	1160.8	1160.4	1159.0	1157.6	1156.2	1154.9
145°	1220.2	1220.2	1220.2	1219.7	1219.0	1218.1	1217.3	1216.5
147.5°	1275.7	1276.4	1277.1	1276.5	1274.6	1272.8	1270.9	1269.1
150°	1310.7	1310.7	1310.7	1310.4	1309.9	1309.3	1308.7	1308.2
152.5°	1343.2	1343.9	1344.5	1344.4	1343.4	1342.5	1341.4	1340.5
155°	1389.9	1390.9	1392.0	1391.9	1390.5	1389.2	1387.8	1386.5
157.5°	1430.2	1431.3	1432.4	1432.0	1430.2	1428.4	1426.6	1424.8
160°	1454.6	1455.8	1456.8	1456.7	1455.4	1454.0	1452.6	1451.2
162.5°	1477.6	1478.8	1480.2	1480.1	1478.5	1476.9	1475.4	1473.8
165°	1508.4	1509.6	1510.6	1510.3	1508.7	1507.1	1505.4	1503.8
167.5°	1531.3	1533.0	1534.6	1534.6	1532.9	1531.2	1529.5	1527.8
170°	1545.0	1546.6	1548.2	1548.1	1546.2	1544.4	1542.4	1540.5
172.5°	1554.8	1556.4	1558.0	1558.0	1556.3	1554.6	1552.9	1551.2
175°	1565.8	1567.4	1569.1	1568.9	1567.0	1565.1	1563.2	1561.3
177.5°	1570.7	1572.1	1573.4	1573.3	1571.7	1570.2	1568.7	1567.2
180°	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1	1571.1

(END OF REPORT)