

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: P333369-930

Luminaire Tested: **S125DIW-S375D1560U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333369-930
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: S125DIW-S375D1560U930-4F0-1E-UDD-F1
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 1560 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 5651.8 lumens
Efficiency: N/A
Efficacy: 105.8 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

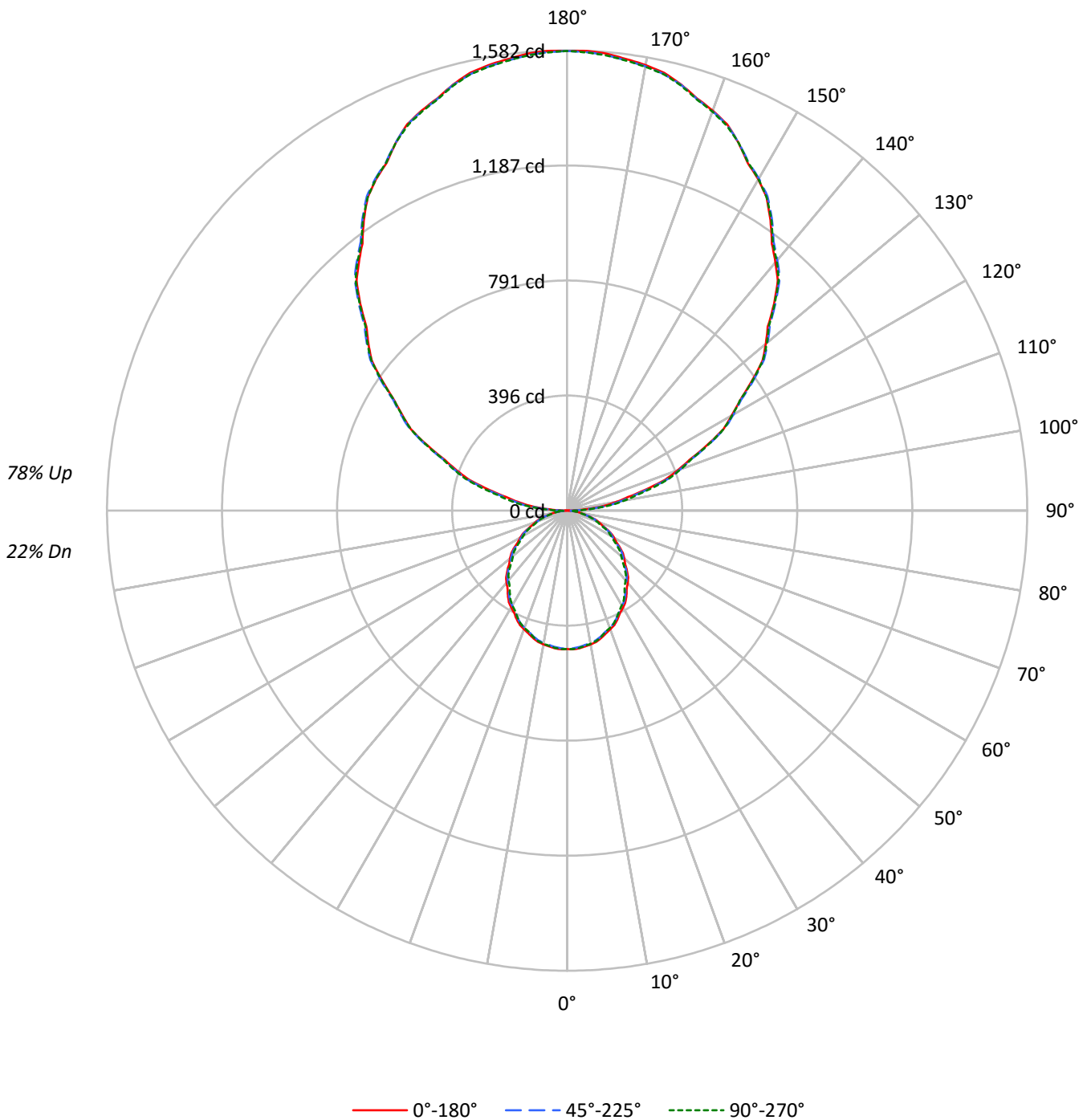
Input Watts (W): 53.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	100	100	100	100	89	89	89	89	68	68	68	48	48	48	30	30	30	22
1	91	87	84	80	81	78	74	72	59	57	55	42	41	40	27	26	26	18
2	83	76	70	65	74	68	63	59	52	48	46	37	35	33	23	22	21	15
3	76	67	60	54	67	59	54	49	46	42	38	33	30	28	21	19	18	13
4	69	59	51	46	61	53	46	41	40	36	32	29	26	24	19	17	16	11
5	63	52	45	39	56	47	40	35	36	31	28	26	23	21	17	15	14	10
6	58	47	39	34	51	42	35	30	32	28	24	23	20	18	15	13	12	9
7	54	42	34	29	47	38	31	26	29	24	21	21	18	16	14	12	11	8
8	50	38	31	26	44	34	28	23	26	22	19	19	16	14	13	11	9	7
9	46	35	27	23	41	31	25	20	24	20	16	18	15	12	12	10	8	6
10	43	31	25	20	38	28	22	18	22	18	15	16	13	11	11	9	8	6

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	0.8
10°-20°	126.9	2.2
20°-30°	187.3	3.3
30°-40°	218.5	3.9
40°-50°	219.5	3.9
50°-60°	192.7	3.4
60°-70°	143.6	2.5
70°-80°	82.1	1.5
80°-90°	27.3	0.5
90°-100°	105.8	1.9
100°-110°	312.5	5.5
110°-120°	529.3	9.4
120°-130°	696.6	12.3
130°-140°	780.6	13.8
140°-150°	765.0	13.5
150°-160°	642.6	11.4
160°-170°	427.1	7.6
170°-180°	149.5	2.6
0°-30°	359.1	6.4
0°-40°	577.6	10.2
0°-60°	989.8	17.5
0°-90°	1242.8	22.0
90°-120°	947.6	16.8
90°-150°	3189.8	56.4
90°-180°	4409.0	78.0
0°-180°	5651.8	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	11	20	26	30	6
95°	80	83	95	103	106	85
105°	280	287	294	301	305	299
115°	530	535	537	536	535	524
125°	773	780	782	780	778	692
135°	1006	1013	1014	1014	1010	775
145°	1218	1223	1227	1227	1223	761
155°	1394	1394	1396	1400	1394	642
165°	1516	1514	1515	1519	1512	428
175°	1576	1572	1571	1578	1570	150
180°	1580	1580	1580	1580	1580	



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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°	8.4	8.8	9.3	9.7	10.1	10.5	10.8	11.2	11.5	11.7	12.1
90°	1.2	3.4	5.6	7.8	9.9	12.0	13.9	15.8	17.8	19.6	21.0
92.5°	29.8	31.3	32.9	34.3	35.9	37.8	40.2	42.5	44.8	47.2	49.0
95°	79.9	80.5	81.0	81.5	82.1	83.7	86.5	89.2	92.0	94.7	96.6
97.5°	132.8	133.0	133.2	133.5	133.7	135.7	139.4	143.2	147.0	150.7	152.5
100°	172.1	172.1	172.1	172.1	172.1	173.9	177.5	181.0	184.6	188.1	190.6
102.5°	214.4	215.6	216.6	217.7	218.8	220.3	222.1	223.9	225.7	227.5	230.2
105°	280.4	281.7	283.1	284.5	285.8	287.3	288.9	290.6	292.2	293.9	295.5
107.5°	353.1	354.5	355.9	357.3	358.6	360.0	361.2	362.4	363.7	364.9	365.7
110°	403.3	404.7	406.0	407.4	408.8	409.9	410.7	411.5	412.3	413.1	413.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	454.4	455.2	455.9	456.6	457.3	458.2	459.2	460.2	461.3	462.4	462.7
115°	529.9	531.1	532.1	533.2	534.3	535.2	535.7	536.2	536.8	537.4	537.0
117.5°	605.7	606.2	606.7	607.2	607.6	608.1	608.6	609.1	609.6	610.2	610.3
120°	652.9	654.3	655.7	657.0	658.4	659.2	659.5	659.7	660.0	660.3	660.3
122.5°	704.1	704.6	705.1	705.6	706.0	706.6	707.4	708.1	708.7	709.5	709.2
125°	773.4	775.0	776.7	778.4	780.0	781.0	781.2	781.5	781.8	782.0	781.5
127.5°	847.2	848.2	849.1	849.9	850.9	851.6	851.9	852.2	852.6	852.9	852.6
130°	891.4	892.8	894.2	895.5	896.9	897.9	898.5	898.9	899.5	900.1	899.8
132.5°	935.7	938.0	940.2	942.5	944.7	945.7	945.7	945.5	945.4	945.3	945.0
135°	1005.8	1007.5	1009.1	1010.7	1012.4	1013.3	1013.6	1013.9	1014.2	1014.4	1014.4
137.5°	1071.7	1073.3	1074.9	1076.4	1078.1	1079.1	1079.8	1080.4	1080.9	1081.6	1081.9
140°	1114.0	1115.4	1116.7	1118.1	1119.5	1120.5	1121.4	1122.3	1123.1	1123.9	1124.4
142.5°	1156.3	1157.5	1158.6	1159.8	1160.9	1162.0	1163.0	1164.1	1165.1	1166.1	1166.4
145°	1218.5	1219.6	1220.7	1221.8	1222.9	1223.8	1224.7	1225.5	1226.3	1227.1	1227.1
147.5°	1276.1	1276.7	1277.2	1277.9	1278.5	1279.1	1279.8	1280.4	1281.1	1281.7	1282.4
150°	1314.4	1314.2	1313.9	1313.6	1313.4	1313.8	1314.8	1316.0	1317.0	1318.2	1318.2
152.5°	1345.9	1346.3	1346.7	1347.0	1347.4	1347.9	1348.3	1348.7	1349.2	1349.6	1350.3
155°	1394.4	1394.4	1394.4	1394.4	1394.4	1394.5	1394.8	1395.1	1395.3	1395.6	1396.7
157.5°	1437.6	1437.0	1436.5	1435.8	1435.3	1435.1	1435.3	1435.7	1435.9	1436.1	1437.3
160°	1463.2	1462.4	1461.6	1460.8	1460.0	1459.7	1460.0	1460.2	1460.5	1460.8	1461.8
162.5°	1485.9	1485.2	1484.7	1484.1	1483.4	1483.2	1483.2	1483.3	1483.4	1483.4	1484.7
165°	1516.1	1515.6	1515.0	1514.5	1513.9	1513.8	1514.1	1514.3	1514.6	1514.9	1516.0
167.5°	1541.6	1540.6	1539.5	1538.4	1537.3	1536.8	1536.8	1536.8	1536.8	1536.8	1538.4
170°	1555.4	1554.4	1553.2	1552.2	1551.1	1550.5	1550.5	1550.5	1550.5	1550.5	1552.2
172.5°	1565.3	1564.2	1563.1	1562.0	1560.9	1560.4	1560.4	1560.4	1560.4	1560.4	1562.0
175°	1576.4	1575.2	1574.2	1573.0	1572.0	1571.4	1571.4	1571.4	1571.4	1571.4	1573.0
177.5°	1582.0	1581.1	1580.3	1579.4	1578.5	1577.9	1577.8	1577.5	1577.3	1577.1	1578.4
180°	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1



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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°	12.3	12.6	12.9	13.0	13.0	13.0	13.1	13.1
90°	22.4	23.8	25.1	26.3	27.1	27.9	28.7	29.5
92.5°	50.8	52.6	54.5	55.6	56.3	56.8	57.4	58.0
95°	98.5	100.4	102.3	103.5	104.1	104.7	105.2	105.7
97.5°	154.3	156.1	157.9	159.1	159.4	159.7	160.0	160.4
100°	193.1	195.5	198.0	199.5	200.0	200.6	201.1	201.6
102.5°	232.8	235.5	238.1	239.9	240.7	241.4	242.2	243.0
105°	297.2	298.8	300.4	301.7	302.5	303.3	304.1	304.9
107.5°	366.6	367.4	368.2	368.6	368.5	368.5	368.4	368.4
110°	414.8	415.6	416.5	416.7	416.5	416.1	415.9	415.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	463.1	463.5	463.8	463.8	463.3	462.8	462.4	461.9
115°	536.8	536.5	536.2	536.0	535.7	535.4	535.2	534.9
117.5°	610.6	610.8	611.0	610.6	609.4	608.4	607.3	606.2
120°	660.3	660.3	660.3	659.7	658.7	657.5	656.5	655.4
122.5°	709.1	708.8	708.6	708.1	707.2	706.3	705.4	704.6
125°	781.0	780.4	779.8	779.4	779.2	778.9	778.6	778.4
127.5°	852.3	852.1	851.7	851.3	850.8	850.3	849.7	849.1
130°	899.5	899.3	898.9	898.5	898.1	897.5	896.9	896.4
132.5°	944.8	944.5	944.2	943.7	943.0	942.2	941.4	940.6
135°	1014.4	1014.4	1014.4	1013.9	1012.8	1011.7	1010.6	1009.5
137.5°	1082.2	1082.6	1082.9	1082.4	1081.0	1079.6	1078.2	1076.8
140°	1124.9	1125.5	1126.0	1125.6	1124.3	1122.9	1121.5	1120.1
142.5°	1166.8	1167.1	1167.5	1166.9	1165.6	1164.2	1162.9	1161.5
145°	1227.1	1227.1	1227.1	1226.7	1225.9	1225.1	1224.3	1223.4
147.5°	1283.0	1283.7	1284.3	1283.8	1281.9	1280.0	1278.2	1276.4
150°	1318.2	1318.2	1318.2	1317.8	1317.3	1316.8	1316.2	1315.6
152.5°	1351.0	1351.6	1352.3	1352.1	1351.1	1350.1	1349.2	1348.2
155°	1397.7	1398.9	1400.0	1399.9	1398.5	1397.1	1395.7	1394.4
157.5°	1438.4	1439.5	1440.6	1440.2	1438.4	1436.6	1434.8	1433.0
160°	1463.0	1464.0	1465.2	1465.0	1463.6	1462.2	1460.9	1459.5
162.5°	1486.0	1487.4	1488.7	1488.5	1486.9	1485.3	1483.8	1482.1
165°	1517.0	1518.2	1519.2	1519.0	1517.4	1515.7	1514.1	1512.4
167.5°	1540.0	1541.6	1543.3	1543.3	1541.6	1539.9	1538.2	1536.5
170°	1553.8	1555.4	1557.1	1557.0	1555.0	1553.1	1551.2	1549.3
172.5°	1563.7	1565.3	1566.9	1566.9	1565.2	1563.5	1561.8	1560.2
175°	1574.8	1576.4	1578.0	1577.8	1576.0	1574.0	1572.1	1570.2
177.5°	1579.7	1581.0	1582.3	1582.3	1580.7	1579.2	1577.6	1576.1
180°	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1	1580.1

(END OF REPORT)