

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: P333342-840

Luminaire Tested: **S125DIW-S375D470U840-4F0-1E-UDD-D**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333342-840
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: S125DIW-S375D470U840-4F0-1E-UDD-D
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER
UPLIGHT 470 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3368.3 lumens
Efficiency: N/A
Efficacy: 146.4 lumens/watt
Spacing Criteria (0/90/45): 1.21 / 1.21 / 1.34
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')
CIE Type: General Diffuse

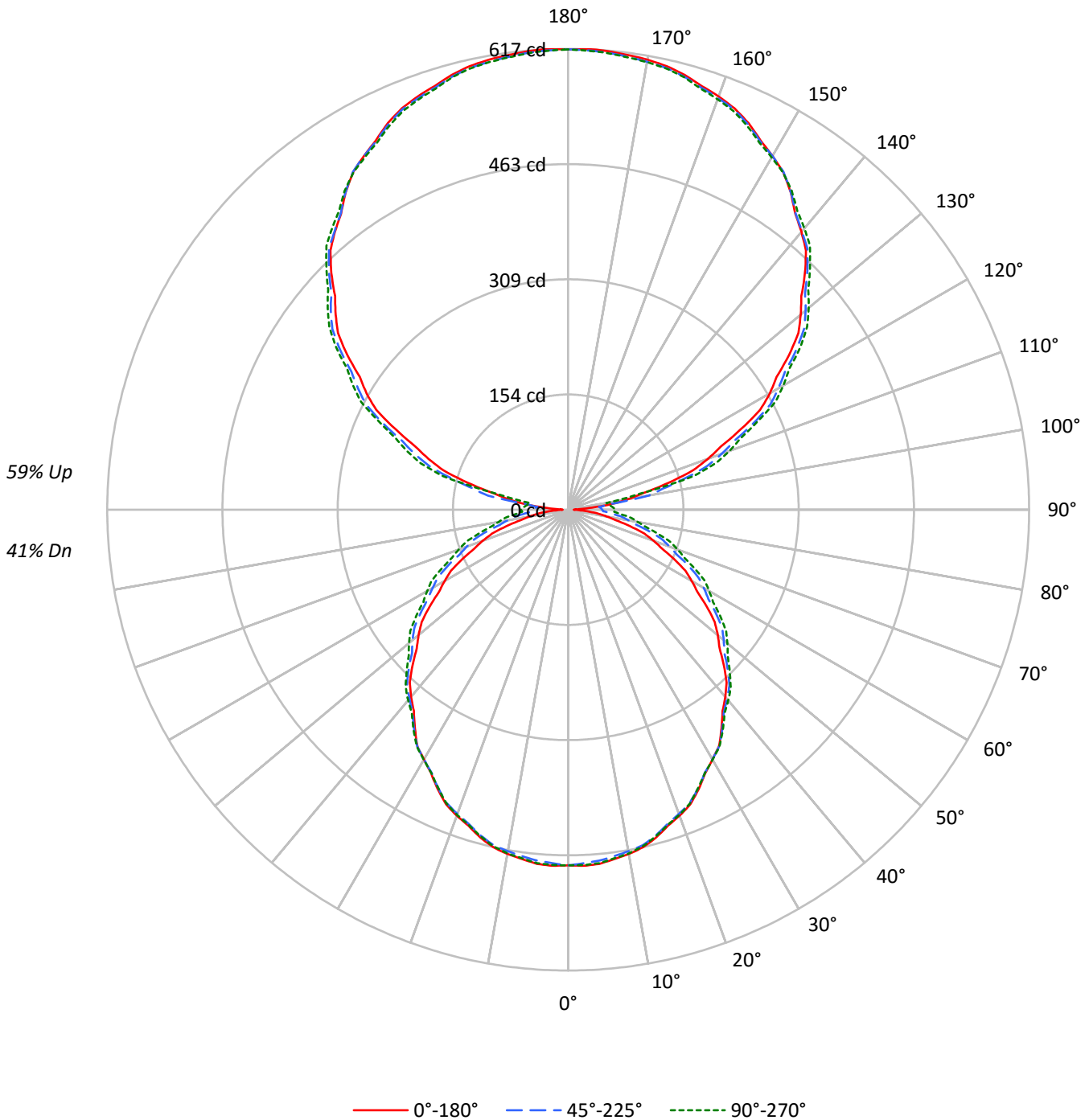
Input Watts (W): 23
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





TEST NUMBER: P333342-840

CATALOG NUMBER: S125DIW-S375D470U840-4F0-1E-UDD-D

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	50	30	10	50	30	10	0		
RCR																										
0	105	105	105	105	96	96	96	96	78	78	78	63	63	63	48	48	48	41					41			
1	95	91	87	83	87	83	79	76	68	65	63	54	52	51	41	40	39					33				
2	86	79	72	67	78	72	66	62	59	55	52	47	44	42	36	34	33					27				
3	79	69	62	56	71	63	57	51	52	47	43	41	38	35	32	29	27					23				
4	72	61	53	47	65	56	49	43	46	41	37	37	33	30	28	26	23					20				
5	66	54	46	40	60	50	42	37	41	35	31	33	29	26	25	23	20					17				
6	61	48	40	34	55	44	37	32	37	31	27	30	26	22	23	20	18					15				
7	56	44	36	30	51	40	33	28	33	28	24	27	23	20	21	18	16					13				
8	52	39	32	26	47	36	29	25	30	25	21	25	21	18	19	16	14					12				
9	48	36	29	23	44	33	26	22	28	22	19	23	19	16	18	15	13					10				
10	45	33	26	21	41	30	24	20	25	20	17	21	17	14	16	14	11					9				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3075	3075	3075
5°	3081	3017	3027
10°	3059	2963	2960
15°	3022	2899	2873
20°	2974	2819	2786
25°	2915	2734	2680
30°	2844	2641	2584
35°	2778	2554	2494
40°	2711	2463	2406
45°	2635	2385	2327
50°	2563	2302	2256
55°	2474	2222	2175
60°	2380	2130	2090
65°	2281	2035	1997
70°	2168	1905	1900
75°	1987	1780	1780
80°	1753	1629	1650
85°	1538	1527	1610



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	45.0	1.3
10°-20°	127.8	3.8
20°-30°	190.0	5.6
30°-40°	225.1	6.7
40°-50°	232.7	6.9
50°-60°	214.4	6.4
60°-70°	173.3	5.1
70°-80°	116.1	3.4
80°-90°	61.5	1.8
90°-100°	56.2	1.7
100°-110°	162.9	4.8
110°-120°	267.0	7.9
120°-130°	330.7	9.8
130°-140°	349.7	10.4
140°-150°	325.2	9.7
150°-160°	262.4	7.8
160°-170°	169.7	5.0
170°-180°	58.5	1.7
0°-30°	362.8	10.8
0°-40°	587.9	17.5
0°-60°	1035.1	30.7
0°-90°	1385.9	41.1
90°-120°	486.1	14.4
90°-150°	1491.8	44.3
90°-180°	1982.0	58.8
0°-180°	3368.3	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	476	476	476	476	476	
5°	476	475	472	475	475	45
15°	454	455	452	454	453	128
25°	413	414	412	413	411	190
35°	358	360	359	361	361	224
45°	294	299	302	305	306	227
55°	226	234	241	246	248	202
65°	156	167	178	184	187	155
75°	86	98	113	122	125	91
85°	26	41	57	67	71	27
90°	8	27	46	58	63	6
95°	32	42	41	53	57	38
105°	139	148	162	171	174	147
115°	255	261	273	279	280	253
125°	360	364	372	378	379	322
135°	448	450	453	458	458	345
145°	519	519	520	522	521	324
155°	571	569	569	570	567	263
165°	603	600	600	603	599	170
175°	616	614	614	617	614	59
180°	616	616	616	616	616	



TEST NUMBER: P333342-840

CATALOG NUMBER: S125DIW-S375D470U840-4F0-1E-UDD-D

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1
2.5°	477.2	477.0	476.9	476.7	476.6	476.2	475.5	474.9	474.4	473.8	474.4
5°	476.1	475.8	475.6	475.4	475.2	474.7	474.0	473.3	472.6	471.8	472.7
7.5°	471.8	471.8	471.7	471.6	471.5	471.1	470.4	469.6	468.9	468.1	468.9
10°	468.1	468.1	468.1	468.1	468.1	467.7	466.9	466.1	465.2	464.3	465.1
12.5°	462.9	463.0	463.0	463.1	463.2	462.9	462.3	461.6	460.9	460.3	460.8
15°	454.5	454.6	454.7	454.9	455.0	454.6	453.9	453.2	452.5	451.8	452.4
17.5°	443.7	443.9	444.1	444.3	444.5	444.3	443.6	442.8	442.1	441.4	441.9
20°	436.0	436.2	436.4	436.6	436.8	436.5	435.8	435.0	434.3	433.5	433.9
22.5°	427.0	427.4	427.7	428.1	428.5	428.2	427.4	426.6	425.8	425.0	425.4
25°	413.0	413.3	413.6	413.9	414.2	414.1	413.5	412.9	412.2	411.6	412.0
27.5°	397.6	398.0	398.5	398.9	399.4	399.3	398.6	397.9	397.2	396.5	396.7
30°	386.0	386.6	387.2	387.9	388.5	388.5	387.9	387.2	386.6	386.0	386.2
32.5°	375.6	376.1	376.6	377.2	377.7	377.7	377.3	376.8	376.4	375.9	376.1
35°	357.5	358.2	359.0	359.7	360.4	360.6	360.3	360.0	359.7	359.4	359.7
37.5°	339.5	340.1	340.8	341.4	342.1	342.4	342.3	342.2	342.1	342.0	342.4
40°	327.2	328.0	328.8	329.6	330.5	330.8	330.7	330.6	330.5	330.4	330.8
42.5°	313.8	314.8	315.9	317.0	318.0	318.7	318.9	319.1	319.4	319.6	320.1
45°	294.5	295.7	296.8	297.9	299.0	299.9	300.4	300.9	301.4	301.9	302.7
47.5°	274.8	275.9	276.9	278.0	279.0	280.0	280.9	281.8	282.7	283.6	284.7
50°	261.4	262.5	263.7	264.8	265.9	267.1	268.2	269.3	270.4	271.7	272.8
52.5°	247.2	248.5	249.9	251.4	252.8	254.1	255.5	256.9	258.3	259.6	260.9
55°	226.3	228.0	229.6	231.4	233.0	234.7	236.3	237.9	239.6	241.3	242.5
57.5°	205.1	207.0	209.0	211.1	213.1	215.0	216.9	218.8	220.8	222.6	223.9
60°	190.9	193.0	195.0	197.1	199.1	201.3	203.3	205.4	207.5	209.5	211.1
62.5°	177.0	179.2	181.3	183.3	185.4	187.5	189.8	192.0	194.3	196.5	198.2
65°	155.9	158.2	160.7	163.0	165.4	167.8	170.4	172.9	175.3	177.8	179.4
67.5°	135.9	138.3	140.5	142.8	145.1	147.5	150.1	152.6	155.1	157.6	159.6
70°	121.4	123.7	126.1	128.5	130.9	133.4	136.1	138.9	141.5	144.2	146.2
72.5°	107.1	109.7	112.1	114.5	117.0	119.8	122.7	125.6	128.6	131.5	133.7
75°	85.8	88.6	91.3	93.9	96.6	99.7	103.0	106.3	109.7	112.9	115.0
77.5°	65.4	68.6	71.7	74.7	77.9	81.0	84.2	87.5	90.6	93.8	96.1
80°	52.7	55.8	59.0	62.1	65.1	68.5	72.0	75.5	79.1	82.6	84.9
82.5°	41.2	44.4	47.8	51.0	54.2	57.8	61.3	64.9	68.6	72.1	74.3
85°	25.7	29.1	32.5	36.0	39.4	42.9	46.6	50.2	53.8	57.4	59.7
87.5°	14.6	18.2	21.6	25.1	28.6	32.1	35.9	39.5	43.1	46.9	49.3
90°	7.9	12.0	16.2	20.3	24.4	28.7	32.8	37.1	41.3	45.5	48.5
92.5°	13.7	16.3	18.8	21.3	23.7	27.2	31.4	35.6	39.9	44.1	46.9
95°	32.1	34.5	36.9	39.3	41.7	42.7	42.4	42.0	41.7	41.4	44.1
97.5°	59.9	62.8	65.8	68.8	71.8	71.2	67.0	62.7	58.5	54.2	53.5
100°	81.4	83.9	86.4	88.9	91.4	94.4	98.2	101.9	105.6	109.4	96.4
102.5°	103.3	105.7	108.2	110.6	112.9	115.8	119.4	122.8	126.3	129.8	129.1
105°	138.6	140.6	142.7	144.7	146.7	149.4	152.5	155.6	158.8	161.8	163.9
107.5°	175.0	176.4	177.8	179.3	180.7	183.0	186.2	189.3	192.6	195.7	197.8
110°	198.8	200.1	201.3	202.6	203.8	205.9	209.0	212.2	215.3	218.4	220.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	221.5	222.7	224.0	225.2	226.4	228.5	231.5	234.4	237.3	240.2	241.8
115°	255.0	256.2	257.4	258.7	259.9	262.0	264.7	267.5	270.3	273.2	274.6
117.5°	289.7	290.1	290.6	291.0	291.5	293.3	296.2	299.1	302.1	305.0	306.2
120°	311.6	311.8	312.0	312.3	312.5	313.9	316.6	319.3	321.9	324.7	326.2
122.5°	330.6	331.1	331.6	332.2	332.8	334.3	336.7	339.1	341.5	344.1	345.5
125°	360.5	361.1	361.7	362.3	362.9	364.3	366.4	368.4	370.5	372.5	373.9
127.5°	388.6	389.0	389.4	389.8	390.2	391.2	392.9	394.6	396.2	397.8	399.1
130°	406.2	406.6	407.0	407.4	407.8	408.8	410.3	411.9	413.4	415.0	416.2
132.5°	423.3	423.9	424.4	425.1	425.7	426.4	427.3	428.2	429.0	429.9	431.3
135°	448.2	448.7	449.2	449.7	450.2	450.7	451.2	451.8	452.3	452.8	453.9
137.5°	471.0	471.5	471.9	472.4	472.8	473.1	473.3	473.4	473.6	473.8	475.0
140°	485.6	485.8	486.0	486.3	486.5	486.6	486.6	486.6	486.6	486.6	487.9
142.5°	499.2	499.2	499.3	499.3	499.3	499.4	499.6	499.8	499.9	500.1	501.1
145°	519.0	519.1	519.2	519.3	519.4	519.5	519.5	519.5	519.5	519.5	520.1
147.5°	535.9	535.8	535.8	535.7	535.7	535.7	535.9	536.0	536.1	536.2	536.5
150°	546.8	546.6	546.4	546.2	546.0	546.0	546.2	546.4	546.6	546.8	547.0
152.5°	557.4	557.0	556.5	556.1	555.6	555.5	555.7	555.9	556.1	556.3	556.5
155°	571.1	570.5	569.9	569.3	568.7	568.5	568.7	568.9	569.1	569.3	569.6
157.5°	581.6	581.2	580.9	580.5	580.1	580.0	580.0	580.0	580.0	580.1	580.4
160°	588.9	588.2	587.6	587.0	586.4	586.2	586.3	586.4	586.5	586.6	587.0
162.5°	594.7	594.1	593.5	592.9	592.3	592.1	592.2	592.3	592.4	592.5	593.0
165°	602.6	602.0	601.4	600.8	600.2	599.9	600.0	600.1	600.2	600.3	600.9
167.5°	608.4	607.8	607.2	606.5	605.9	605.6	605.7	605.8	605.9	606.0	606.8
170°	611.8	611.1	610.3	609.6	608.8	608.5	608.6	608.7	608.8	608.9	609.8
172.5°	613.9	613.2	612.5	611.8	611.1	610.9	611.0	611.2	611.4	611.6	612.3
175°	616.3	615.7	615.1	614.5	613.9	613.6	613.7	613.8	613.9	614.0	614.8
177.5°	617.4	616.9	616.4	615.9	615.4	615.2	615.3	615.4	615.5	615.6	616.1
180°	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	476.1	476.1	476.1	476.1	476.1	476.1	476.1	476.1
2.5°	474.9	475.5	476.2	476.4	476.3	476.3	476.2	476.1
5°	473.5	474.3	475.1	475.5	475.4	475.3	475.2	475.1
7.5°	469.6	470.3	471.0	471.3	471.2	471.1	471.0	470.9
10°	465.9	466.6	467.3	467.6	467.5	467.4	467.3	467.2
12.5°	461.4	461.9	462.5	462.6	462.4	462.1	461.8	461.6
15°	453.0	453.6	454.2	454.3	453.9	453.5	453.1	452.7
17.5°	442.4	442.8	443.3	443.4	443.2	442.9	442.7	442.4
20°	434.2	434.5	434.8	434.9	434.9	434.9	434.9	434.9
22.5°	425.8	426.2	426.6	426.7	426.4	426.2	425.9	425.7
25°	412.4	412.9	413.3	413.2	412.7	412.2	411.7	411.2
27.5°	397.0	397.3	397.6	397.7	397.5	397.3	397.1	396.9
30°	386.4	386.6	386.8	386.9	386.8	386.7	386.6	386.5
32.5°	376.3	376.5	376.7	376.8	376.7	376.6	376.5	376.4
35°	360.0	360.3	360.6	360.7	360.7	360.7	360.7	360.7
37.5°	342.8	343.3	343.7	343.9	343.9	343.8	343.8	343.7
40°	331.2	331.6	332.1	332.4	332.6	332.9	333.1	333.3
42.5°	320.6	321.1	321.6	321.8	321.9	321.9	321.9	322.0
45°	303.5	304.2	304.9	305.3	305.4	305.5	305.6	305.7
47.5°	285.7	286.8	287.8	288.4	288.7	288.9	289.1	289.3
50°	273.9	275.1	276.2	276.9	277.2	277.5	277.8	278.1
52.5°	262.2	263.4	264.6	265.3	265.5	265.8	266.0	266.2
55°	243.6	244.7	245.9	246.6	247.0	247.4	247.9	248.3
57.5°	225.2	226.5	227.8	228.6	228.9	229.2	229.6	229.9
60°	212.7	214.2	215.8	216.7	217.0	217.3	217.6	217.9
62.5°	200.0	201.7	203.4	204.4	204.8	205.2	205.6	206.0
65°	181.0	182.5	184.0	185.0	185.4	185.8	186.3	186.7
67.5°	161.5	163.3	165.2	166.4	166.9	167.5	168.0	168.5
70°	148.1	150.2	152.1	153.4	154.0	154.6	155.2	155.9
72.5°	135.8	137.9	140.1	141.4	141.8	142.3	142.7	143.2
75°	117.1	119.2	121.3	122.5	123.1	123.6	124.1	124.6
77.5°	98.4	100.7	102.9	104.3	104.7	105.1	105.5	105.9
80°	87.2	89.5	91.7	93.1	93.5	93.9	94.3	94.7
82.5°	76.5	78.8	81.0	82.4	83.2	83.9	84.6	85.4
85°	62.0	64.2	66.6	68.1	68.9	69.8	70.6	71.4
87.5°	51.8	54.3	56.8	58.4	59.2	60.0	60.8	61.6
90°	51.4	54.2	57.2	59.1	60.2	61.2	62.2	63.2
92.5°	49.7	52.5	55.3	57.2	58.1	58.9	59.8	60.6
95°	47.0	49.8	52.5	54.3	55.0	55.7	56.5	57.2
97.5°	52.8	52.1	51.5	51.5	52.2	52.9	53.6	54.3
100°	83.4	70.5	57.6	51.2	51.4	51.6	51.8	52.1
102.5°	128.3	127.4	126.7	123.2	116.9	110.7	104.3	98.1
105°	165.9	168.0	170.1	171.5	172.1	172.7	173.3	174.0
107.5°	200.0	202.0	204.1	205.3	205.6	205.9	206.3	206.6
110°	221.8	223.4	225.0	226.3	227.1	227.9	228.7	229.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	243.3	244.8	246.3	247.3	247.9	248.5	249.1	249.6
115°	276.1	277.5	278.9	279.7	279.7	279.7	279.7	279.7
117.5°	307.4	308.7	309.9	310.7	311.2	311.6	312.0	312.6
120°	327.8	329.3	330.9	331.7	331.8	331.9	332.1	332.2
122.5°	347.0	348.4	349.9	350.7	350.7	350.7	350.8	350.8
125°	375.1	376.3	377.6	378.3	378.5	378.7	379.0	379.2
127.5°	400.4	401.7	403.0	403.6	403.5	403.3	403.2	403.0
130°	417.3	418.4	419.6	420.1	420.2	420.2	420.2	420.2
132.5°	432.7	434.1	435.5	436.2	436.1	436.1	436.0	435.9
135°	455.1	456.3	457.4	458.0	457.9	457.8	457.7	457.6
137.5°	476.4	477.6	478.9	479.5	479.3	479.2	479.1	479.0
140°	489.3	490.6	491.9	492.5	492.3	492.1	491.9	491.7
142.5°	502.1	503.1	504.1	504.5	504.3	504.1	503.9	503.8
145°	520.7	521.3	521.9	522.1	521.9	521.8	521.6	521.4
147.5°	536.8	537.1	537.5	537.2	536.7	536.2	535.6	535.1
150°	547.2	547.4	547.6	547.4	546.7	546.0	545.3	544.6
152.5°	556.7	556.9	557.1	556.9	556.2	555.5	554.8	554.1
155°	569.9	570.2	570.5	570.2	569.4	568.6	567.7	566.9
157.5°	580.7	581.0	581.3	581.1	580.3	579.5	578.7	577.8
160°	587.4	587.8	588.2	588.0	587.2	586.4	585.6	584.8
162.5°	593.6	594.2	594.7	594.6	593.7	592.8	591.9	591.0
165°	601.6	602.2	602.8	602.7	601.9	601.0	600.2	599.4
167.5°	607.5	608.2	608.9	608.9	607.9	607.0	606.1	605.2
170°	610.6	611.5	612.3	612.2	611.3	610.4	609.5	608.5
172.5°	613.0	613.7	614.5	614.4	613.5	612.6	611.7	610.8
175°	615.6	616.4	617.2	617.2	616.3	615.4	614.5	613.6
177.5°	616.7	617.2	617.8	617.8	617.1	616.5	615.8	615.2
180°	616.3	616.3	616.3	616.3	616.3	616.3	616.3	616.3

(END OF REPORT)