

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: P333351-930

Luminaire Tested: **S125DIW-S375D770U930-4F0-1E-UDD-F1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333351-930  
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-S375D770U930-4F0-1E-UDD-F1  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
UPLIGHT 770 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3411.2 lumens  
Efficiency: N/A  
Efficacy: 112.2 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

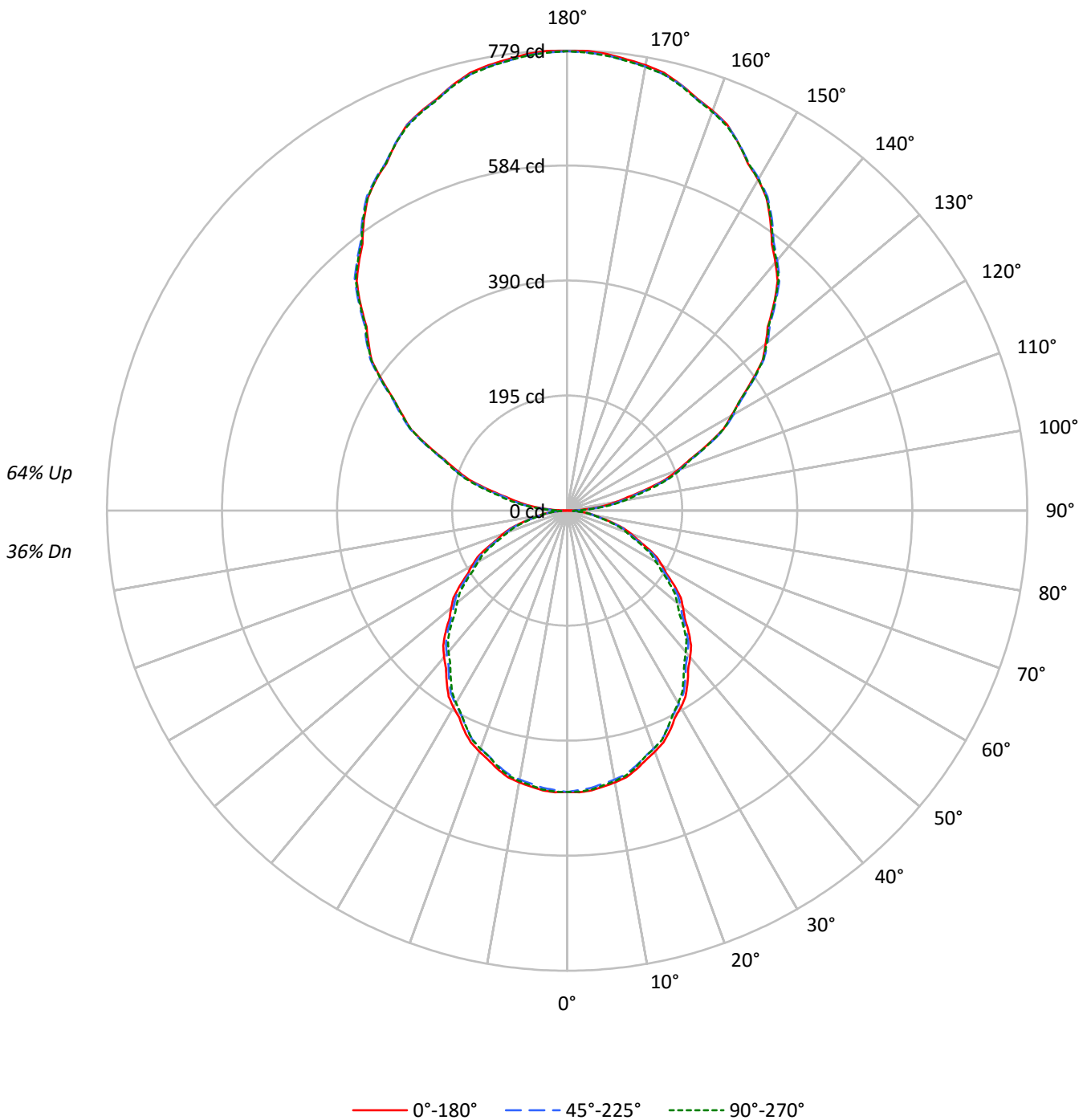
Input Watts (W): 30.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	104	104	104	104	94	94	94	94	76	76	76	59	59	59	44	44	44	36
1	95	90	87	83	86	82	79	76	66	64	62	52	50	49	38	38	37	31
2	86	79	73	68	78	72	67	62	58	54	51	45	43	41	34	32	31	26
3	79	69	62	56	71	63	57	52	51	47	43	40	37	34	30	28	26	22
4	72	61	53	48	65	56	49	44	45	40	37	36	32	29	27	24	23	19
5	66	54	47	41	59	50	43	38	40	35	31	32	28	25	24	22	20	16
6	61	49	41	35	55	44	38	32	36	31	27	29	25	22	22	19	17	14
7	56	44	36	31	50	40	33	28	33	28	24	26	22	20	20	17	15	13
8	52	40	32	27	47	36	30	25	30	25	21	24	20	17	18	16	14	11
9	48	36	29	24	44	33	27	22	27	22	19	22	18	16	17	14	12	10
10	45	33	26	21	41	30	24	20	25	20	17	20	17	14	16	13	11	9

**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	1.3
10°-20°	126.9	3.7
20°-30°	187.3	5.5
30°-40°	218.5	6.4
40°-50°	219.5	6.4
50°-60°	192.7	5.6
60°-70°	143.6	4.2
70°-80°	82.1	2.4
80°-90°	25.6	0.7
90°-100°	52.1	1.5
100°-110°	153.8	4.5
110°-120°	260.5	7.6
120°-130°	342.9	10.1
130°-140°	384.2	11.3
140°-150°	376.6	11.0
150°-160°	316.3	9.3
160°-170°	210.2	6.2
170°-180°	73.6	2.2
0°-30°	359.1	10.5
0°-40°	577.6	16.9
0°-60°	989.8	29.0
0°-90°	1241.0	36.4
90°-120°	466.4	13.7
90°-150°	1570.1	46.0
90°-180°	2170.0	63.6
0°-180°	3411.2	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	5	10	13	14	3
95°	39	41	47	51	52	42
105°	138	141	145	148	150	147
115°	261	263	264	264	263	258
125°	381	384	385	384	383	341
135°	495	499	499	499	497	381
145°	600	602	604	604	602	375
155°	686	686	687	689	686	316
165°	746	745	746	748	744	210
175°	776	774	774	777	773	74
180°	778	778	778	778	778	



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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°	8.2	8.5	8.7	8.9	9.1	9.3	9.4	9.5	9.6	9.8	9.9
90°	0.6	1.7	2.8	3.8	4.9	6.0	6.8	7.8	8.7	9.7	10.4
92.5°	14.7	15.4	16.1	16.9	17.7	18.6	19.8	21.0	22.1	23.2	24.1
95°	39.4	39.6	39.9	40.1	40.4	41.3	42.6	43.9	45.2	46.6	47.5
97.5°	65.4	65.5	65.6	65.7	65.8	66.8	68.6	70.5	72.3	74.2	75.1
100°	84.7	84.7	84.7	84.7	84.7	85.6	87.3	89.1	90.8	92.6	93.8
102.5°	105.6	106.1	106.6	107.1	107.7	108.4	109.3	110.2	111.0	111.9	113.3
105°	138.0	138.7	139.3	140.0	140.7	141.5	142.3	143.0	143.8	144.6	145.4
107.5°	173.8	174.5	175.2	175.9	176.5	177.2	177.8	178.4	179.0	179.6	180.0
110°	198.5	199.2	199.8	200.6	201.2	201.7	202.1	202.5	202.9	203.3	203.7



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	223.7	224.0	224.4	224.8	225.1	225.5	226.0	226.6	227.1	227.6	227.8
115°	260.9	261.4	262.0	262.4	263.0	263.4	263.7	263.9	264.2	264.5	264.3
117.5°	298.2	298.4	298.6	298.9	299.1	299.4	299.6	299.9	300.1	300.4	300.4
120°	321.4	322.0	322.7	323.4	324.1	324.5	324.6	324.7	324.9	325.0	325.0
122.5°	346.6	346.8	347.1	347.3	347.6	347.8	348.1	348.5	348.9	349.2	349.1
125°	380.7	381.5	382.3	383.1	383.9	384.4	384.5	384.7	384.8	384.9	384.7
127.5°	417.0	417.4	417.9	418.4	418.8	419.1	419.3	419.5	419.6	419.8	419.6
130°	438.8	439.4	440.2	440.8	441.5	442.0	442.2	442.5	442.8	443.0	442.9
132.5°	460.6	461.7	462.8	463.9	465.0	465.5	465.5	465.4	465.4	465.3	465.2
135°	495.0	495.9	496.7	497.5	498.3	498.8	498.9	499.0	499.2	499.3	499.3
137.5°	527.5	528.3	529.0	529.9	530.7	531.2	531.5	531.7	532.1	532.4	532.6
140°	548.4	549.0	549.7	550.3	551.1	551.5	552.0	552.4	552.8	553.2	553.4
142.5°	569.2	569.7	570.3	570.9	571.4	571.9	572.5	573.0	573.5	574.0	574.1
145°	599.8	600.3	600.9	601.4	601.9	602.4	602.8	603.2	603.6	604.1	604.1
147.5°	628.1	628.4	628.7	629.0	629.3	629.6	629.9	630.2	630.6	630.9	631.2
150°	647.0	646.9	646.7	646.6	646.5	646.7	647.2	647.8	648.2	648.8	648.8
152.5°	662.5	662.7	662.8	663.1	663.2	663.4	663.7	663.9	664.1	664.3	664.6
155°	686.3	686.3	686.3	686.3	686.3	686.4	686.6	686.6	686.8	687.0	687.5
157.5°	707.7	707.4	707.0	706.8	706.5	706.4	706.5	706.6	706.8	706.9	707.4
160°	720.2	719.8	719.4	719.0	718.6	718.4	718.6	718.8	718.8	719.0	719.6
162.5°	731.4	731.1	730.8	730.5	730.2	730.0	730.1	730.1	730.1	730.2	730.8
165°	746.2	746.0	745.8	745.4	745.2	745.1	745.3	745.3	745.5	745.7	746.2
167.5°	758.9	758.3	757.7	757.2	756.7	756.4	756.4	756.4	756.4	756.4	757.2
170°	765.6	765.1	764.5	764.0	763.4	763.2	763.2	763.2	763.2	763.2	764.0
172.5°	770.5	769.9	769.4	768.8	768.3	768.0	768.0	768.0	768.0	768.0	768.8
175°	775.9	775.3	774.9	774.3	773.7	773.5	773.5	773.5	773.5	773.5	774.3
177.5°	778.7	778.3	777.8	777.4	777.0	776.7	776.6	776.5	776.4	776.2	776.9
180°	777.7	777.7	777.7	777.7	777.7	777.7	777.7	777.7	777.7	777.7	777.7



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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°	10.0	10.2	10.3	10.4	10.3	10.3	10.2	10.1
90°	11.0	11.7	12.4	12.9	13.3	13.7	14.1	14.5
92.5°	25.0	25.9	26.8	27.4	27.7	28.0	28.3	28.5
95°	48.5	49.4	50.4	51.0	51.3	51.5	51.8	52.0
97.5°	76.0	76.9	77.8	78.3	78.4	78.6	78.8	78.9
100°	95.0	96.2	97.4	98.2	98.5	98.7	99.0	99.2
102.5°	114.6	115.9	117.2	118.1	118.5	118.9	119.2	119.6
105°	146.3	147.1	147.9	148.5	148.9	149.3	149.7	150.1
107.5°	180.4	180.8	181.2	181.4	181.4	181.4	181.3	181.3
110°	204.2	204.6	205.0	205.1	205.0	204.8	204.7	204.6





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	228.0	228.1	228.3	228.3	228.0	227.8	227.6	227.3
115°	264.2	264.1	263.9	263.8	263.7	263.6	263.4	263.3
117.5°	300.5	300.6	300.8	300.5	300.0	299.5	298.9	298.4
120°	325.0	325.0	325.0	324.7	324.2	323.7	323.1	322.6
122.5°	349.0	348.9	348.8	348.5	348.1	347.6	347.2	346.8
125°	384.4	384.1	383.8	383.7	383.5	383.4	383.3	383.1
127.5°	419.6	419.4	419.2	419.1	418.8	418.5	418.2	418.0
130°	442.8	442.6	442.5	442.3	442.1	441.7	441.5	441.2
132.5°	465.0	464.9	464.8	464.5	464.1	463.7	463.4	463.0
135°	499.3	499.3	499.3	499.0	498.5	498.0	497.4	496.9
137.5°	532.7	532.9	533.0	532.7	532.1	531.4	530.8	530.0
140°	553.8	554.0	554.2	554.1	553.4	552.7	552.0	551.4
142.5°	574.3	574.5	574.6	574.4	573.7	573.1	572.3	571.7
145°	604.1	604.1	604.1	603.8	603.4	603.0	602.6	602.2
147.5°	631.5	631.9	632.2	631.9	631.0	630.1	629.2	628.3
150°	648.8	648.8	648.8	648.7	648.4	648.2	647.8	647.6
152.5°	665.0	665.3	665.6	665.5	665.0	664.6	664.1	663.6
155°	688.0	688.5	689.1	689.0	688.4	687.7	687.0	686.3
157.5°	708.0	708.5	709.1	708.9	708.0	707.1	706.2	705.3
160°	720.1	720.6	721.1	721.1	720.4	719.7	719.1	718.4
162.5°	731.5	732.1	732.7	732.7	731.9	731.1	730.3	729.5
165°	746.7	747.3	747.8	747.6	746.9	746.1	745.3	744.4
167.5°	758.1	758.9	759.6	759.6	758.8	758.0	757.2	756.3
170°	764.8	765.6	766.5	766.4	765.4	764.5	763.5	762.6
172.5°	769.6	770.5	771.3	771.3	770.5	769.6	768.7	767.9
175°	775.1	775.9	776.7	776.7	775.7	774.8	773.8	772.9
177.5°	777.6	778.2	778.9	778.8	778.0	777.3	776.6	775.8
180°	777.7	777.7	777.7	777.7	777.7	777.7	777.7	777.7

(END OF REPORT)