

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: P333348-935

Luminaire Tested: **S125DIW-S375D770U935-4F0-1E-UDD-D**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333348-935  
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-S375D770U935-4F0-1E-UDD-D  
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 770 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3901.8 lumens  
Efficiency: N/A  
Efficacy: 128.3 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: Semi-Indirect

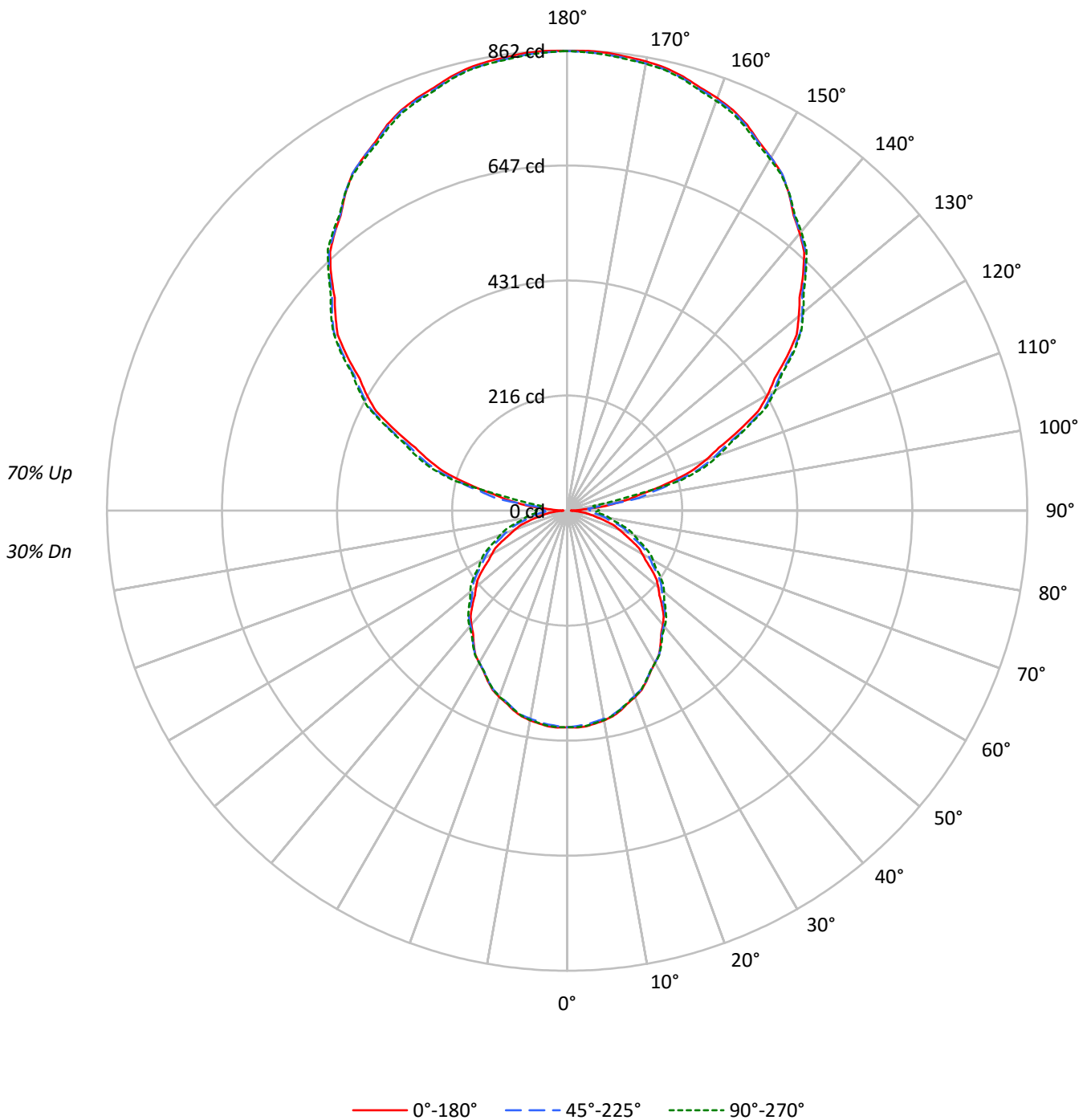
Input Watts (W): 30.4  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





TEST NUMBER: P333348-935

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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	92	92	92	92	72	72	72	54	54	54	38	38	38	30
1	93	89	85	81	83	80	76	73	63	60	58	47	46	44	33	32	31	25
2	84	77	71	66	75	69	64	60	55	51	48	41	39	37	29	27	26	20
3	77	67	60	54	69	61	55	50	48	44	40	36	33	31	25	23	22	17
4	70	60	52	46	63	54	47	42	42	38	34	32	29	26	22	20	19	14
5	64	53	45	39	57	48	41	36	38	33	29	29	25	22	20	18	16	12
6	59	47	39	34	53	43	36	31	34	29	25	26	22	20	18	16	14	11
7	54	42	35	29	49	38	32	27	31	26	22	23	20	17	17	14	12	10
8	50	38	31	26	45	35	28	24	28	23	19	21	18	15	15	13	11	9
9	47	35	28	23	42	32	25	21	25	21	17	20	16	14	14	12	10	8
10	44	32	25	20	39	29	23	19	23	19	15	18	15	12	13	11	9	7

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2621	2621	2621
5°	2627	2573	2581
10°	2608	2527	2523
15°	2577	2472	2450
20°	2535	2404	2376
25°	2485	2331	2285
30°	2425	2251	2203
35°	2369	2178	2127
40°	2312	2100	2051
45°	2247	2033	1983
50°	2184	1962	1924
55°	2110	1894	1854
60°	2028	1817	1782
65°	1944	1736	1703
70°	1849	1625	1620
75°	1695	1518	1517
80°	1493	1389	1408
85°	1311	1301	1373



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	38.4	1.0
10°-20°	108.9	2.8
20°-30°	162.0	4.2
30°-40°	191.9	4.9
40°-50°	198.4	5.1
50°-60°	182.8	4.7
60°-70°	147.8	3.8
70°-80°	99.0	2.5
80°-90°	53.1	1.4
90°-100°	60.1	1.5
100°-110°	214.0	5.5
110°-120°	363.8	9.3
120°-130°	456.7	11.7
130°-140°	486.1	12.5
140°-150°	453.7	11.6
150°-160°	366.4	9.4
160°-170°	237.0	6.1
170°-180°	81.7	2.1
0°-30°	309.4	7.9
0°-40°	501.3	12.8
0°-60°	882.5	22.6
0°-90°	1182.3	30.3
90°-120°	637.9	16.3
90°-150°	2034.3	52.1
90°-180°	2719.0	69.7
0°-180°	3901.8	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	406	406	406	406	406	
5°	406	405	402	405	405	38
15°	388	388	385	387	386	109
25°	352	353	351	352	351	162
35°	305	307	306	308	308	191
45°	251	255	257	260	261	194
55°	193	199	206	210	212	172
65°	133	142	152	157	159	132
75°	73	84	96	104	106	78
85°	22	35	49	57	61	23
90°	7	25	43	55	60	6
95°	42	49	39	51	54	50
105°	191	200	212	220	222	203
115°	355	361	372	376	375	351
125°	502	507	514	518	518	448
135°	625	629	630	634	632	482
145°	724	725	725	728	726	453
155°	798	794	795	796	792	367
165°	842	838	838	842	837	238
175°	861	857	858	862	857	82
180°	861	861	861	861	861	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9
2.5°	406.8	406.7	406.6	406.4	406.3	406.0	405.4	404.9	404.5	404.0	404.5
5°	405.9	405.7	405.5	405.4	405.2	404.8	404.2	403.6	402.9	402.3	403.0
7.5°	402.3	402.3	402.2	402.1	402.0	401.7	401.1	400.4	399.8	399.1	399.8
10°	399.1	399.1	399.1	399.1	399.1	398.7	398.0	397.4	396.7	395.9	396.6
12.5°	394.7	394.8	394.8	394.9	394.9	394.7	394.2	393.6	393.0	392.4	392.9
15°	387.5	387.6	387.7	387.9	388.0	387.6	387.0	386.4	385.8	385.2	385.7
17.5°	378.3	378.5	378.7	378.8	379.0	378.8	378.2	377.5	376.9	376.3	376.8
20°	371.7	371.9	372.0	372.2	372.4	372.1	371.5	370.9	370.3	369.6	370.0
22.5°	364.0	364.4	364.6	365.0	365.3	365.1	364.4	363.7	363.0	362.3	362.7
25°	352.1	352.4	352.7	352.9	353.2	353.1	352.6	352.1	351.5	350.9	351.3
27.5°	339.0	339.3	339.8	340.1	340.5	340.4	339.8	339.2	338.6	338.0	338.2
30°	329.1	329.6	330.1	330.7	331.2	331.2	330.7	330.1	329.6	329.1	329.2
32.5°	320.2	320.6	321.1	321.6	322.0	322.0	321.7	321.2	320.9	320.5	320.6
35°	304.8	305.4	306.1	306.7	307.3	307.5	307.2	306.9	306.7	306.4	306.7
37.5°	289.5	290.0	290.6	291.1	291.7	292.0	291.9	291.8	291.7	291.6	292.0
40°	279.0	279.7	280.3	281.0	281.8	282.1	282.0	281.9	281.8	281.7	282.1
42.5°	267.5	268.4	269.3	270.3	271.1	271.7	271.9	272.1	272.3	272.5	272.9
45°	251.1	252.1	253.0	254.0	254.9	255.7	256.1	256.6	257.0	257.4	258.0
47.5°	234.3	235.2	236.1	237.0	237.9	238.8	239.5	240.2	241.0	241.8	242.7
50°	222.8	223.8	224.8	225.8	226.7	227.7	228.7	229.6	230.6	231.6	232.6
52.5°	210.8	211.9	213.1	214.3	215.5	216.6	217.8	219.0	220.2	221.4	222.5
55°	193.0	194.4	195.8	197.3	198.6	200.1	201.5	202.9	204.3	205.7	206.7
57.5°	174.9	176.5	178.2	179.9	181.7	183.3	184.9	186.6	188.2	189.8	190.9
60°	162.7	164.5	166.3	168.1	169.8	171.6	173.3	175.1	176.9	178.7	179.9
62.5°	150.9	152.7	154.5	156.3	158.1	159.9	161.8	163.7	165.7	167.6	169.0
65°	132.9	134.9	137.0	139.0	141.0	143.1	145.3	147.4	149.5	151.6	152.9
67.5°	115.9	117.9	119.8	121.7	123.7	125.8	127.9	130.1	132.2	134.4	136.0
70°	103.5	105.5	107.5	109.5	111.6	113.7	116.1	118.4	120.6	123.0	124.7
72.5°	91.4	93.5	95.6	97.6	99.8	102.1	104.6	107.1	109.6	112.1	114.0
75°	73.2	75.5	77.8	80.1	82.4	85.0	87.8	90.7	93.5	96.3	98.1
77.5°	55.8	58.5	61.1	63.7	66.4	69.1	71.8	74.6	77.2	80.0	82.0
80°	44.9	47.6	50.3	53.0	55.5	58.4	61.4	64.4	67.4	70.4	72.4
82.5°	35.1	37.9	40.7	43.5	46.2	49.2	52.3	55.4	58.5	61.5	63.4
85°	21.9	24.8	27.7	30.7	33.6	36.6	39.7	42.8	45.9	48.9	50.9
87.5°	12.6	15.6	18.7	21.7	24.8	27.9	31.1	34.3	37.5	40.7	42.9
90°	7.0	10.9	14.9	18.9	22.9	26.9	30.8	34.9	38.8	42.9	45.5
92.5°	15.6	17.4	19.2	21.0	22.8	25.7	29.7	33.7	37.6	41.6	44.3
95°	41.5	43.4	45.3	47.2	49.0	48.8	46.4	44.0	41.7	39.3	41.9
97.5°	80.6	83.4	86.3	89.1	92.0	89.5	81.7	74.0	66.2	58.5	56.3
100°	110.9	113.2	115.5	117.8	120.0	122.9	126.3	129.7	133.1	136.5	117.2
102.5°	141.7	144.0	146.3	148.5	150.8	153.4	156.5	159.6	162.7	165.8	163.6
105°	191.1	193.1	195.1	197.1	199.1	201.4	204.1	206.7	209.3	212.0	213.8
107.5°	242.5	243.7	244.9	246.1	247.3	249.3	252.1	254.9	257.8	260.6	262.4
110°	275.9	276.9	277.9	279.1	280.1	282.0	284.7	287.5	290.2	293.0	294.3



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	307.5	308.7	309.9	311.1	312.2	314.1	316.7	319.3	321.8	324.4	325.5
115°	354.6	355.9	357.2	358.5	359.9	361.7	364.2	366.6	369.0	371.5	372.6
117.5°	403.3	403.6	404.1	404.4	404.8	406.3	409.1	411.7	414.5	417.2	417.9
120°	433.9	434.0	434.1	434.3	434.4	435.7	438.2	440.6	443.1	445.5	446.8
122.5°	460.6	461.3	461.9	462.6	463.3	464.7	466.8	469.0	471.1	473.4	474.5
125°	502.4	503.3	504.2	505.1	506.0	507.4	509.1	510.9	512.6	514.4	515.3
127.5°	541.9	542.5	543.2	543.8	544.4	545.4	546.7	548.1	549.5	550.9	551.9
130°	566.5	567.1	567.7	568.3	568.9	569.9	571.3	572.7	574.0	575.4	576.3
132.5°	590.6	591.4	592.2	593.1	593.8	594.5	595.2	595.8	596.5	597.1	598.3
135°	625.3	626.1	626.9	627.7	628.4	629.0	629.3	629.6	630.0	630.3	631.2
137.5°	657.3	658.0	658.7	659.4	660.0	660.3	660.4	660.4	660.5	660.6	661.6
140°	678.0	678.2	678.5	678.8	679.1	679.2	679.2	679.1	679.0	679.0	680.2
142.5°	696.8	696.9	697.0	697.1	697.2	697.3	697.6	697.8	698.0	698.2	699.1
145°	724.5	724.7	724.9	725.0	725.3	725.4	725.4	725.4	725.4	725.4	726.0
147.5°	748.4	748.3	748.2	748.2	748.1	748.2	748.4	748.5	748.6	748.8	749.2
150°	763.6	763.4	763.1	762.8	762.5	762.5	762.8	763.1	763.4	763.6	764.0
152.5°	778.4	777.8	777.2	776.6	775.9	775.8	776.1	776.4	776.6	776.9	777.2
155°	797.5	796.6	795.7	794.9	794.1	793.8	794.1	794.4	794.6	794.9	795.3
157.5°	812.1	811.7	811.1	810.6	810.1	809.9	809.9	809.9	809.9	809.9	810.5
160°	822.3	821.5	820.6	819.8	819.0	818.6	818.7	818.9	819.0	819.2	819.8
162.5°	830.5	829.7	828.8	827.9	827.1	826.7	826.9	827.1	827.2	827.3	828.1
165°	841.5	840.6	839.8	839.0	838.1	837.8	837.8	838.0	838.2	838.3	839.1
167.5°	849.6	848.8	847.9	847.1	846.1	845.8	845.9	846.0	846.2	846.4	847.3
170°	854.3	853.3	852.2	851.3	850.2	849.8	850.0	850.2	850.2	850.4	851.5
172.5°	857.3	856.4	855.3	854.3	853.3	853.0	853.3	853.5	853.8	854.0	855.0
175°	860.7	859.8	858.9	858.1	857.2	856.9	857.0	857.1	857.3	857.5	858.6
177.5°	862.1	861.4	860.8	860.1	859.5	859.1	859.3	859.4	859.5	859.6	860.4
180°	860.7	860.7	860.7	860.7	860.7	860.7	860.7	860.7	860.7	860.7	860.7



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	405.9	405.9	405.9	405.9	405.9	405.9	405.9	405.9
2.5°	404.9	405.4	406.0	406.1	406.0	406.0	406.0	405.9
5°	403.7	404.4	405.1	405.4	405.4	405.3	405.2	405.1
7.5°	400.4	401.0	401.6	401.8	401.7	401.7	401.6	401.5
10°	397.2	397.8	398.4	398.6	398.6	398.5	398.4	398.3
12.5°	393.4	393.8	394.3	394.4	394.3	394.0	393.7	393.6
15°	386.2	386.8	387.3	387.4	387.0	386.7	386.3	386.0
17.5°	377.2	377.5	378.0	378.1	377.9	377.6	377.5	377.2
20°	370.2	370.5	370.7	370.8	370.8	370.8	370.8	370.8
22.5°	363.0	363.3	363.7	363.8	363.5	363.3	363.1	362.9
25°	351.6	352.1	352.4	352.3	351.9	351.5	351.0	350.6
27.5°	338.5	338.7	339.0	339.1	338.9	338.7	338.5	338.4
30°	329.4	329.6	329.8	329.8	329.8	329.7	329.6	329.5
32.5°	320.8	321.0	321.2	321.2	321.2	321.1	321.0	320.9
35°	306.9	307.2	307.5	307.5	307.5	307.5	307.5	307.5
37.5°	292.3	292.7	293.0	293.2	293.2	293.1	293.1	293.0
40°	282.4	282.8	283.2	283.4	283.6	283.8	284.0	284.1
42.5°	273.4	273.8	274.2	274.4	274.5	274.5	274.5	274.6
45°	258.7	259.3	259.9	260.3	260.4	260.5	260.5	260.6
47.5°	243.6	244.5	245.4	245.9	246.2	246.3	246.5	246.7
50°	233.5	234.5	235.5	236.1	236.3	236.6	236.9	237.1
52.5°	223.5	224.5	225.6	226.2	226.4	226.6	226.8	227.0
55°	207.7	208.6	209.7	210.3	210.6	210.9	211.4	211.7
57.5°	192.0	193.1	194.2	194.9	195.2	195.4	195.8	196.0
60°	181.3	182.6	184.0	184.8	185.0	185.3	185.5	185.8
62.5°	170.5	171.9	173.4	174.3	174.6	175.0	175.3	175.6
65°	154.3	155.6	156.9	157.7	158.1	158.4	158.9	159.2
67.5°	137.7	139.2	140.9	141.9	142.3	142.8	143.3	143.7
70°	126.3	128.0	129.7	130.8	131.3	131.8	132.3	132.9
72.5°	115.8	117.6	119.4	120.5	120.9	121.3	121.7	122.1
75°	99.9	101.6	103.4	104.4	105.0	105.4	105.8	106.2
77.5°	83.9	85.8	87.7	88.9	89.3	89.6	90.0	90.3
80°	74.3	76.3	78.2	79.4	79.7	80.1	80.4	80.8
82.5°	65.3	67.2	69.1	70.3	70.9	71.5	72.2	72.8
85°	52.9	54.8	56.7	58.0	58.7	59.5	60.2	60.9
87.5°	45.0	47.3	49.4	50.9	51.6	52.3	53.0	53.6
90°	48.3	51.1	53.8	55.7	56.7	57.8	58.8	59.8
92.5°	46.9	49.6	52.3	54.0	54.8	55.6	56.5	57.3
95°	44.6	47.2	49.9	51.5	52.1	52.8	53.4	54.0
97.5°	54.2	52.0	49.9	49.1	49.7	50.3	50.9	51.5
100°	98.0	78.7	59.4	49.8	49.7	49.7	49.7	49.6
102.5°	161.4	159.2	157.0	151.3	142.2	133.1	124.0	114.9
105°	215.5	217.3	219.0	220.2	220.7	221.2	221.6	222.1
107.5°	264.2	266.0	267.8	268.7	268.8	268.9	269.1	269.1
110°	295.6	296.8	298.1	299.0	299.8	300.6	301.4	302.1





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	326.6	327.6	328.7	329.4	329.8	330.3	330.7	331.1
115°	373.6	374.6	375.6	376.0	375.7	375.3	375.0	374.7
117.5°	418.7	419.5	420.3	420.8	420.9	421.2	421.5	421.7
120°	448.0	449.2	450.4	450.9	450.7	450.6	450.4	450.2
122.5°	475.6	476.8	477.9	478.4	478.0	477.8	477.5	477.2
125°	516.1	516.9	517.8	518.2	518.2	518.3	518.3	518.3
127.5°	552.8	553.9	554.8	555.1	554.6	554.1	553.5	552.9
130°	577.0	577.9	578.7	578.9	578.7	578.4	578.2	577.9
132.5°	599.4	600.5	601.8	602.2	601.8	601.5	601.2	600.8
135°	632.1	632.9	633.8	634.0	633.6	633.2	632.7	632.4
137.5°	662.7	663.8	665.0	665.3	664.9	664.5	664.1	663.7
140°	681.5	682.7	684.0	684.3	683.9	683.4	682.9	682.3
142.5°	700.0	700.9	701.8	702.0	701.5	700.9	700.5	700.0
145°	726.5	727.1	727.7	727.7	727.3	726.8	726.3	725.7
147.5°	749.5	749.8	750.1	749.8	749.0	748.1	747.3	746.4
150°	764.2	764.5	764.8	764.4	763.4	762.3	761.3	760.3
152.5°	777.5	777.7	778.1	777.7	776.7	775.7	774.7	773.7
155°	795.7	796.2	796.6	796.3	795.1	794.0	792.9	791.7
157.5°	810.9	811.3	811.8	811.4	810.3	809.2	808.0	806.9
160°	820.3	820.9	821.4	821.1	820.0	818.9	817.8	816.6
162.5°	828.9	829.7	830.5	830.3	829.1	827.8	826.6	825.3
165°	840.0	840.9	841.7	841.5	840.4	839.3	838.2	837.0
167.5°	848.3	849.4	850.4	850.3	849.0	847.7	846.4	845.2
170°	852.6	853.9	855.0	854.9	853.6	852.3	851.0	849.8
172.5°	856.0	857.0	858.1	857.9	856.7	855.4	854.1	852.8
175°	859.7	860.8	861.9	861.9	860.7	859.4	858.1	856.8
177.5°	861.2	861.9	862.8	862.7	861.8	860.9	860.0	859.1
180°	860.7	860.7	860.7	860.7	860.7	860.7	860.7	860.7

(END OF REPORT)