

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: P333137-930

Luminaire Tested: **S125DIP-S375D810U930-4F0-1E-UDD-D1**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333137-930  
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: S125DIP-S375D810U930-4F0-1E-UDD-D1  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, DROP SATIN WHITE DIFFUSER  
UPLIGHT 810 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3478.2 lumens  
Efficiency: N/A  
Efficacy: 111.5 lumens/watt  
Spacing Criteria (0/90/45): 1.21 / 1.22 / 1.34  
Luminous Opening: Rectangular w/ Sides (W: 0.42' x L: 4' x H: 0.08')  
CIE Type: Semi-Indirect

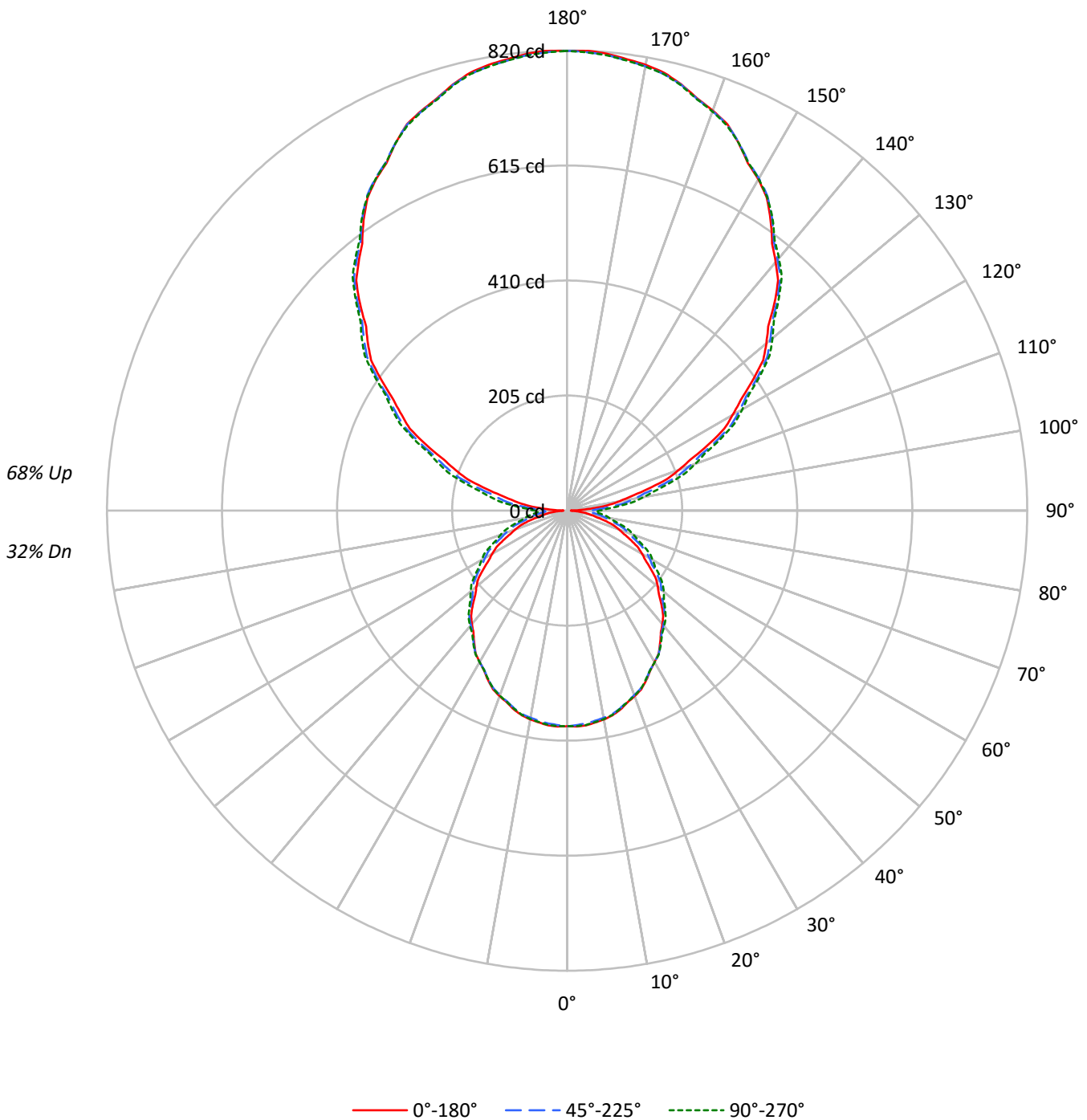
Input Watts (W): 31.2  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	103	103	103	103	93	93	93	93	73	73	73	56	56	56	40	40	40	32
1	93	89	85	81	84	80	77	74	64	61	59	48	47	45	34	33	33	26
2	85	77	71	66	76	70	64	60	55	52	49	42	40	38	30	28	27	21
3	77	68	60	55	69	61	55	50	49	44	41	37	34	31	26	24	23	18
4	70	60	52	46	63	54	47	42	43	38	34	33	30	27	23	21	19	15
5	64	53	45	39	58	48	41	36	38	33	29	29	26	23	21	19	17	13
6	59	47	39	34	53	43	36	31	34	29	25	26	23	20	19	17	15	12
7	55	43	35	29	49	39	32	27	31	26	22	24	20	18	17	15	13	10
8	51	39	31	26	45	35	28	24	28	23	20	22	18	16	16	13	12	9
9	47	35	28	23	42	32	25	21	26	21	17	20	16	14	15	12	10	8
10	44	32	25	20	39	29	23	19	24	19	16	18	15	13	14	11	9	7

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

	0°	45°	90°
0°	2482	2482	2482
5°	2487	2436	2444
10°	2469	2393	2389
15°	2440	2341	2319
20°	2401	2276	2249
25°	2354	2207	2164
30°	2296	2132	2086
35°	2243	2062	2014
40°	2189	1989	1942
45°	2127	1926	1878
50°	2069	1858	1821
55°	1998	1793	1756
60°	1921	1720	1687
65°	1842	1644	1612
70°	1750	1538	1534
75°	1605	1438	1437
80°	1417	1316	1333
85°	1239	1232	1299



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	36.3	1.0
10°-20°	103.2	3.0
20°-30°	153.4	4.4
30°-40°	181.7	5.2
40°-50°	187.9	5.4
50°-60°	173.1	5.0
60°-70°	139.9	4.0
70°-80°	93.7	2.7
80°-90°	50.4	1.4
90°-100°	82.1	2.4
100°-110°	182.1	5.2
110°-120°	287.9	8.3
120°-130°	368.8	10.6
130°-140°	408.0	11.7
140°-150°	397.3	11.4
150°-160°	333.2	9.6
160°-170°	221.5	6.4
170°-180°	77.5	2.2
0°-30°	292.9	8.4
0°-40°	474.7	13.6
0°-60°	835.7	24.0
0°-90°	1119.7	32.2
90°-120°	552.2	15.9
90°-150°	1726.4	49.6
90°-180°	2358.0	67.8
0°-180°	3478.2	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	384	384	384	384	384	
5°	384	384	381	384	384	36
15°	367	367	365	367	366	103
25°	334	334	332	334	332	153
35°	289	291	290	291	291	181
45°	238	242	244	246	247	183
55°	183	189	195	199	200	163
65°	126	134	144	149	151	125
75°	69	79	91	98	101	74
85°	21	33	46	54	58	22
90°	7	24	41	53	58	6
95°	46	58	77	89	93	48
105°	149	158	173	184	189	159
115°	277	283	293	299	301	274
125°	402	406	414	419	420	360
135°	522	526	529	534	533	402
145°	632	634	636	638	638	395
155°	723	723	724	726	723	333
165°	786	785	786	788	784	222
175°	817	815	815	818	814	78
180°	819	819	819	819	819	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3
2.5°	385.2	385.1	385.0	384.8	384.7	384.4	383.9	383.4	383.0	382.5	383.0
5°	384.3	384.2	384.0	383.8	383.7	383.3	382.7	382.1	381.6	380.9	381.6
7.5°	380.9	380.9	380.8	380.7	380.7	380.3	379.8	379.1	378.5	377.9	378.5
10°	377.9	377.9	377.9	377.9	377.9	377.6	376.9	376.3	375.6	374.9	375.5
12.5°	373.7	373.8	373.8	373.9	374.0	373.7	373.2	372.7	372.1	371.6	372.0
15°	367.0	367.0	367.1	367.3	367.4	367.0	366.5	365.9	365.3	364.8	365.3
17.5°	358.2	358.4	358.6	358.7	358.9	358.7	358.2	357.5	356.9	356.4	356.8
20°	352.0	352.1	352.3	352.5	352.6	352.4	351.8	351.2	350.7	350.0	350.3
22.5°	344.7	345.0	345.3	345.6	345.9	345.7	345.0	344.4	343.7	343.1	343.4
25°	333.5	333.7	333.9	334.2	334.4	334.4	333.9	333.4	332.8	332.3	332.6
27.5°	321.0	321.3	321.7	322.0	322.5	322.4	321.8	321.2	320.7	320.1	320.2
30°	311.6	312.1	312.6	313.2	313.6	313.6	313.2	312.6	312.1	311.6	311.8
32.5°	303.2	303.6	304.0	304.5	304.9	304.9	304.6	304.2	303.9	303.5	303.6
35°	288.6	289.2	289.8	290.4	291.0	291.1	290.9	290.7	290.4	290.2	290.4
37.5°	274.1	274.6	275.2	275.7	276.2	276.5	276.4	276.3	276.2	276.1	276.5
40°	264.2	264.8	265.5	266.1	266.8	267.1	267.0	266.9	266.8	266.8	267.1
42.5°	253.3	254.1	255.0	255.9	256.7	257.3	257.5	257.6	257.9	258.0	258.4
45°	237.7	238.7	239.6	240.5	241.4	242.1	242.6	243.0	243.4	243.8	244.3
47.5°	221.8	222.7	223.6	224.5	225.3	226.1	226.8	227.5	228.2	228.9	229.8
50°	211.0	211.9	212.9	213.8	214.7	215.6	216.5	217.4	218.3	219.3	220.2
52.5°	199.6	200.6	201.8	202.9	204.1	205.1	206.3	207.4	208.6	209.6	210.7
55°	182.7	184.1	185.4	186.8	188.1	189.5	190.8	192.1	193.5	194.8	195.8
57.5°	165.6	167.1	168.8	170.4	172.0	173.6	175.1	176.7	178.2	179.7	180.8
60°	154.1	155.8	157.4	159.1	160.8	162.5	164.1	165.8	167.5	169.2	170.4
62.5°	142.9	144.6	146.3	148.0	149.7	151.4	153.2	155.0	156.9	158.7	160.0
65°	125.9	127.8	129.7	131.6	133.5	135.5	137.5	139.6	141.5	143.6	144.8
67.5°	109.7	111.6	113.4	115.3	117.2	119.1	121.2	123.2	125.2	127.3	128.8
70°	98.0	99.9	101.8	103.7	105.7	107.7	109.9	112.1	114.2	116.4	118.1
72.5°	86.5	88.5	90.5	92.5	94.5	96.7	99.1	101.4	103.8	106.2	107.9
75°	69.3	71.5	73.7	75.8	78.0	80.5	83.2	85.9	88.5	91.2	92.9
77.5°	52.8	55.4	57.9	60.3	62.9	65.4	68.0	70.6	73.1	75.7	77.6
80°	42.6	45.1	47.6	50.1	52.6	55.3	58.1	61.0	63.8	66.7	68.6
82.5°	33.3	35.9	38.6	41.2	43.8	46.6	49.5	52.4	55.4	58.2	60.0
85°	20.7	23.5	26.3	29.0	31.8	34.7	37.6	40.5	43.5	46.3	48.2
87.5°	11.9	14.8	17.7	20.6	23.5	26.5	29.5	32.6	35.6	38.6	40.8
90°	6.7	10.5	14.3	18.1	21.9	25.8	29.6	33.4	37.3	41.1	43.7
92.5°	20.9	24.1	27.4	30.7	33.9	37.7	41.7	45.9	50.1	54.1	57.0
95°	46.3	48.8	51.3	53.7	56.2	59.5	63.8	68.1	72.3	76.6	79.4
97.5°	73.3	75.3	77.5	79.5	81.6	85.0	89.7	94.4	99.1	103.8	106.5
100°	93.4	95.1	96.9	98.7	100.4	103.5	108.1	112.6	117.2	121.6	124.7
102.5°	115.0	117.2	119.4	121.6	123.8	126.7	130.2	133.8	137.3	140.9	143.9
105°	148.7	150.8	152.9	154.9	156.9	159.6	163.0	166.4	169.7	173.1	175.6
107.5°	186.1	187.8	189.7	191.6	193.4	195.9	198.9	202.0	205.0	208.1	210.2
110°	211.7	213.4	215.2	216.9	218.6	220.9	223.6	226.4	229.2	232.0	233.9



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	238.2	239.5	240.6	241.8	243.0	244.9	247.8	250.5	253.4	256.2	258.0
115°	277.0	278.2	279.3	280.5	281.7	283.5	285.9	288.4	290.8	293.3	294.6
117.5°	315.9	316.6	317.2	317.9	318.5	320.0	322.3	324.6	326.9	329.2	330.8
120°	340.4	341.4	342.3	343.3	344.2	345.8	347.8	349.9	352.0	354.0	355.5
122.5°	366.6	367.0	367.4	367.8	368.1	369.4	371.6	373.9	376.1	378.3	379.6
125°	402.5	403.2	404.1	404.8	405.6	406.8	408.7	410.5	412.3	414.2	415.2
127.5°	440.4	440.8	441.2	441.6	442.0	443.0	444.5	446.1	447.6	449.1	450.2
130°	463.3	464.0	464.6	465.2	465.9	466.8	468.3	469.8	471.2	472.7	473.7
132.5°	486.0	487.1	488.3	489.4	490.6	491.5	492.4	493.3	494.1	495.0	495.9
135°	522.3	523.0	523.7	524.6	525.3	526.0	526.8	527.5	528.2	529.0	530.0
137.5°	556.4	557.1	557.8	558.6	559.4	560.0	560.6	561.3	561.8	562.4	563.6
140°	578.0	578.7	579.4	580.1	580.8	581.4	582.0	582.4	582.9	583.4	584.7
142.5°	599.9	600.5	601.0	601.5	602.0	602.6	603.1	603.6	604.2	604.8	605.8
145°	632.2	632.7	633.2	633.7	634.1	634.5	635.0	635.4	635.9	636.3	636.7
147.5°	661.6	661.9	662.3	662.6	662.8	663.2	663.6	663.9	664.2	664.6	665.0
150°	681.5	681.3	681.3	681.1	680.9	681.2	681.8	682.3	682.9	683.5	683.5
152.5°	697.8	698.1	698.2	698.5	698.6	698.9	699.0	699.3	699.5	699.8	700.1
155°	722.9	722.9	722.9	722.9	722.9	723.0	723.2	723.3	723.4	723.6	724.1
157.5°	745.4	745.1	744.8	744.4	744.1	744.0	744.2	744.4	744.4	744.6	745.2
160°	758.6	758.2	757.8	757.4	756.9	756.8	756.9	757.1	757.2	757.4	758.0
162.5°	770.4	770.1	769.7	769.5	769.2	769.0	769.0	769.1	769.1	769.2	769.8
165°	786.1	785.8	785.5	785.2	785.0	784.9	785.0	785.1	785.3	785.5	786.0
167.5°	799.3	798.7	798.2	797.6	797.0	796.8	796.8	796.8	796.8	796.8	797.6
170°	806.5	805.9	805.4	804.8	804.2	803.9	803.9	803.9	803.9	803.9	804.8
172.5°	811.5	811.0	810.4	809.8	809.3	809.0	809.0	809.0	809.0	809.0	809.8
175°	817.3	816.8	816.2	815.6	815.1	814.7	814.7	814.7	814.7	814.7	815.6
177.5°	820.3	819.8	819.4	818.9	818.4	818.2	818.1	817.9	817.8	817.7	818.4
180°	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	384.3	384.3	384.3	384.3	384.3	384.3	384.3	384.3
2.5°	383.4	383.9	384.4	384.6	384.5	384.5	384.4	384.3
5°	382.3	382.9	383.6	383.9	383.8	383.8	383.7	383.6
7.5°	379.1	379.7	380.3	380.5	380.4	380.3	380.3	380.2
10°	376.1	376.7	377.2	377.5	377.4	377.3	377.2	377.2
12.5°	372.5	372.9	373.4	373.5	373.3	373.1	372.8	372.7
15°	365.7	366.2	366.7	366.8	366.5	366.2	365.8	365.5
17.5°	357.2	357.5	357.9	358.0	357.8	357.6	357.4	357.2
20°	350.6	350.8	351.1	351.1	351.1	351.1	351.1	351.1
22.5°	343.7	344.1	344.4	344.5	344.2	344.1	343.8	343.6
25°	333.0	333.4	333.7	333.6	333.2	332.8	332.4	332.0
27.5°	320.5	320.7	321.0	321.1	320.9	320.7	320.6	320.4
30°	311.9	312.1	312.3	312.3	312.3	312.2	312.1	312.0
32.5°	303.8	303.9	304.1	304.2	304.1	304.0	303.9	303.9
35°	290.7	290.9	291.1	291.2	291.2	291.2	291.2	291.2
37.5°	276.8	277.1	277.4	277.6	277.6	277.5	277.5	277.4
40°	267.4	267.7	268.2	268.4	268.6	268.7	268.9	269.0
42.5°	258.9	259.3	259.7	259.8	259.9	259.9	259.9	260.0
45°	245.0	245.6	246.1	246.5	246.5	246.6	246.7	246.8
47.5°	230.6	231.5	232.4	232.8	233.1	233.3	233.4	233.6
50°	221.1	222.1	223.0	223.6	223.8	224.0	224.3	224.5
52.5°	211.7	212.6	213.6	214.2	214.3	214.6	214.7	214.9
55°	196.7	197.5	198.5	199.1	199.4	199.7	200.2	200.5
57.5°	181.8	182.9	183.9	184.6	184.8	185.1	185.4	185.6
60°	171.7	172.9	174.2	175.0	175.2	175.5	175.7	175.9
62.5°	161.4	162.8	164.2	165.0	165.3	165.7	166.0	166.3
65°	146.1	147.3	148.5	149.4	149.7	150.0	150.4	150.7
67.5°	130.4	131.8	133.4	134.4	134.8	135.3	135.7	136.1
70°	119.6	121.2	122.8	123.8	124.3	124.8	125.3	125.9
72.5°	109.7	111.4	113.1	114.1	114.5	114.9	115.2	115.6
75°	94.6	96.2	97.9	98.9	99.4	99.8	100.2	100.6
77.5°	79.4	81.3	83.1	84.2	84.5	84.9	85.2	85.5
80°	70.4	72.2	74.0	75.2	75.5	75.8	76.1	76.5
82.5°	61.8	63.6	65.4	66.5	67.2	67.8	68.3	69.0
85°	50.1	51.9	53.7	55.0	55.6	56.3	57.0	57.6
87.5°	42.8	44.8	47.0	48.3	49.0	49.7	50.3	51.0
90°	46.4	49.0	51.6	53.5	54.5	55.4	56.5	57.5
92.5°	59.8	62.5	65.4	67.2	68.1	69.0	69.9	70.8
95°	82.3	85.1	88.0	89.8	90.7	91.6	92.4	93.3
97.5°	109.2	111.9	114.5	116.3	117.0	117.7	118.5	119.2
100°	127.8	130.8	133.8	135.7	136.5	137.3	138.0	138.8
102.5°	147.0	150.1	153.2	155.2	156.0	156.9	157.8	158.7
105°	178.1	180.7	183.2	185.0	186.0	186.9	188.0	189.0
107.5°	212.3	214.3	216.5	217.8	218.3	218.7	219.2	219.7
110°	235.9	238.0	239.9	241.2	241.7	242.1	242.6	243.0





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	259.7	261.4	263.1	264.2	264.5	264.8	265.1	265.5
115°	296.0	297.4	298.7	299.6	299.9	300.4	300.7	301.1
117.5°	332.3	333.9	335.4	336.1	336.1	336.1	336.1	336.1
120°	356.9	358.3	359.7	360.4	360.4	360.3	360.2	360.1
122.5°	380.8	382.0	383.3	383.9	384.0	384.0	384.1	384.2
125°	416.2	417.3	418.3	419.1	419.3	419.6	419.9	420.1
127.5°	451.3	452.4	453.6	454.1	454.4	454.5	454.8	454.9
130°	474.7	475.8	476.8	477.4	477.5	477.7	477.8	477.9
132.5°	497.0	498.1	499.0	499.5	499.5	499.5	499.5	499.4
135°	531.2	532.2	533.4	533.8	533.6	533.5	533.4	533.2
137.5°	564.8	565.9	567.0	567.4	567.0	566.7	566.3	566.0
140°	585.9	587.1	588.2	588.6	588.3	587.9	587.6	587.2
142.5°	606.7	607.6	608.6	608.9	608.5	608.1	607.8	607.4
145°	637.1	637.5	637.9	638.1	638.0	637.9	637.8	637.7
147.5°	665.5	666.0	666.4	666.3	665.4	664.6	663.8	663.0
150°	683.5	683.5	683.5	683.3	683.1	682.9	682.7	682.6
152.5°	700.4	700.7	701.1	701.0	700.5	700.0	699.5	699.0
155°	724.7	725.3	725.9	725.8	725.0	724.4	723.7	722.9
157.5°	745.8	746.3	746.9	746.7	745.8	744.9	743.9	743.0
160°	758.6	759.0	759.6	759.6	758.9	758.1	757.4	756.8
162.5°	770.5	771.2	771.8	771.8	770.9	770.1	769.3	768.5
165°	786.6	787.2	787.7	787.6	786.7	785.9	785.0	784.2
167.5°	798.5	799.3	800.2	800.1	799.3	798.4	797.5	796.6
170°	805.6	806.5	807.3	807.2	806.2	805.3	804.3	803.3
172.5°	810.7	811.5	812.4	812.4	811.5	810.7	809.8	808.9
175°	816.4	817.3	818.2	818.1	817.1	816.1	815.1	814.2
177.5°	819.0	819.7	820.4	820.4	819.5	818.8	818.0	817.2
180°	819.2	819.2	819.2	819.2	819.2	819.2	819.2	819.2

(END OF REPORT)