

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: P333493-940

Luminaire Tested: **S125RDIP-S375D365U940-4F0-1E-UDD-F**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P333493-940  
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: S125RDIP-S375D365U940-4F0-1E-UDD-F  
Description: DEFINE 5 DIRECT-INDIRECT PENDANT LED LUMINAIRE  
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER, REGRESSED  
HOUSING  
UPLIGHT 365 LUMENS PER FOOT, NO LENS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 2595.7 lumens  
Efficiency: N/A  
Efficacy: 127.9 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.11 / 1.25  
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')  
CIE Type: General Diffuse

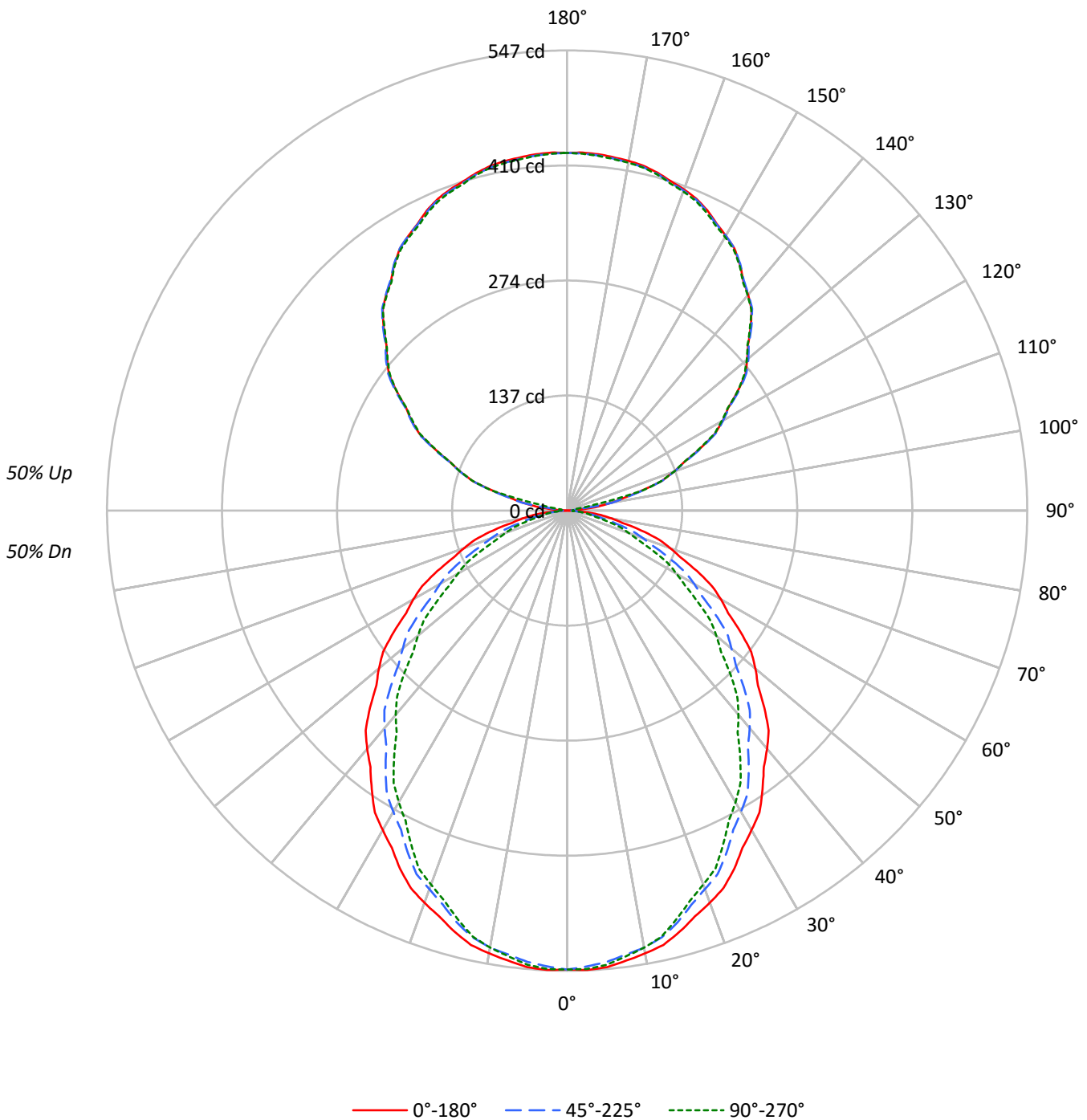
Input Watts (W): 20.3  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	98	94	90	86	90	87	83	80	73	71	69	61	59	58	50	49	48	42
2	89	82	76	71	82	76	71	66	64	61	57	54	51	49	44	42	40	36
3	82	72	65	59	75	67	61	56	57	52	48	48	44	41	39	37	35	31
4	75	64	56	50	69	59	53	47	51	46	41	43	39	36	35	32	30	26
5	69	57	49	43	63	53	46	41	45	40	36	38	34	31	32	29	26	23
6	63	51	43	38	58	48	41	35	41	35	31	35	30	27	29	26	23	20
7	59	46	39	33	54	43	36	31	37	32	28	32	27	24	26	23	21	18
8	54	42	34	29	50	39	32	28	34	29	25	29	25	22	24	21	19	16
9	51	39	31	26	47	36	29	25	31	26	22	27	22	19	22	19	17	15
10	47	35	28	23	44	33	27	22	29	24	20	25	21	18	21	18	15	13

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

	0°	45°	90°
0°	3524	3524	3524
5°	3532	3492	3513
10°	3505	3459	3459
15°	3463	3389	3361
20°	3410	3291	3252
25°	3348	3195	3125
30°	3270	3082	2984
35°	3191	2967	2827
40°	3117	2845	2672
45°	3027	2711	2503
50°	2936	2563	2327
55°	2831	2422	2139
60°	2725	2251	1938
65°	2601	2054	1705
70°	2459	1805	1469
75°	2263	1522	1223
80°	1993	1194	1027
85°	1675	978	919



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	51.3	2.0
10°-20°	143.4	5.5
20°-30°	207.9	8.0
30°-40°	237.0	9.1
40°-50°	231.0	8.9
50°-60°	194.4	7.5
60°-70°	136.3	5.3
70°-80°	70.1	2.7
80°-90°	18.6	0.7
90°-100°	15.5	0.6
100°-110°	95.2	3.7
110°-120°	172.7	6.7
120°-130°	221.7	8.5
130°-140°	238.4	9.2
140°-150°	223.8	8.6
150°-160°	181.0	7.0
160°-170°	117.1	4.5
170°-180°	40.4	1.6
0°-30°	402.6	15.5
0°-40°	639.6	24.6
0°-60°	1065.0	41.0
0°-90°	1289.9	49.7
90°-120°	283.4	10.9
90°-150°	967.3	37.3
90°-180°	1306.0	50.3
0°-180°	2595.7	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	546	546	546	546	546	
5°	545	543	539	542	542	52
15°	518	515	507	506	503	146
25°	470	463	448	443	438	216
35°	405	394	376	365	359	253
45°	331	319	297	281	274	256
55°	251	238	215	197	190	225
65°	170	156	134	118	112	169
75°	91	78	61	52	49	96
85°	23	16	13	13	12	25
90°	0	3	5	7	8	2
95°	18	16	5	6	7	23
105°	93	94	94	94	94	98
115°	174	176	176	175	173	172
125°	247	250	250	248	247	221
135°	309	310	310	309	307	238
145°	358	358	358	359	357	224
155°	394	392	393	394	391	181
165°	416	414	414	416	414	117
175°	425	424	424	426	423	40
180°	425	425	425	425	425	



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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6
2.5°	546.6	546.4	546.2	546.0	545.7	545.3	544.6	543.8	543.1	542.3	543.1
5°	544.8	544.5	544.1	543.7	543.3	542.7	541.6	540.6	539.7	538.6	539.6
7.5°	539.5	539.1	538.8	538.4	538.1	537.3	536.1	534.8	533.7	532.4	533.1
10°	534.5	534.2	534.0	533.7	533.4	532.6	531.4	530.0	528.8	527.5	527.8
12.5°	528.9	528.5	528.2	527.9	527.5	526.5	524.8	523.1	521.3	519.6	519.8
15°	518.0	517.5	516.9	516.4	515.9	514.6	512.6	510.8	508.8	506.9	506.8
17.5°	505.8	504.9	504.1	503.2	502.4	500.8	498.3	495.9	493.5	491.1	490.6
20°	496.1	495.3	494.4	493.5	492.5	490.6	487.7	484.7	481.8	478.8	478.4
22.5°	485.6	484.7	483.8	482.9	482.0	480.0	476.9	473.9	470.7	467.7	466.8
25°	469.8	468.4	467.1	465.7	464.3	461.9	458.5	455.1	451.7	448.4	447.2
27.5°	451.7	450.0	448.4	446.7	445.0	442.4	438.7	435.1	431.5	427.8	426.1
30°	438.5	436.8	435.0	433.3	431.5	428.7	424.9	421.1	417.2	413.3	411.3
32.5°	425.6	423.6	421.6	419.5	417.5	414.6	410.6	406.7	402.8	398.9	396.5
35°	404.7	402.5	400.3	398.1	395.9	392.7	388.6	384.5	380.4	376.3	373.6
37.5°	384.1	381.5	378.8	376.1	373.4	370.0	365.8	361.5	357.3	353.0	349.8
40°	369.7	366.9	364.2	361.4	358.6	355.1	350.7	346.3	341.9	337.5	334.0
42.5°	354.5	351.7	348.8	346.1	343.2	339.6	335.0	330.5	325.9	321.4	318.1
45°	331.4	328.7	326.0	323.3	320.7	316.8	311.8	306.8	301.8	296.8	293.0
47.5°	307.4	304.5	301.8	298.9	296.1	292.2	287.1	282.0	277.0	271.9	268.1
50°	292.2	289.2	286.1	283.1	280.1	276.0	270.7	265.6	260.3	255.1	251.3
52.5°	275.7	272.6	269.5	266.4	263.3	259.3	254.4	249.4	244.5	239.6	235.5
55°	251.4	248.4	245.5	242.6	239.7	235.7	230.5	225.3	220.3	215.1	211.0
57.5°	226.9	223.7	220.5	217.4	214.3	210.3	205.3	200.4	195.5	190.5	186.5
60°	211.0	207.8	204.6	201.3	198.1	194.1	189.1	184.2	179.2	174.3	170.3
62.5°	194.2	191.1	188.1	185.0	181.9	177.9	172.9	167.9	162.8	157.8	154.1
65°	170.2	167.1	164.0	160.9	157.7	153.7	148.9	144.1	139.2	134.4	130.7
67.5°	146.4	143.3	140.2	137.1	133.9	130.0	125.4	120.7	116.1	111.5	108.1
70°	130.2	127.2	124.0	120.9	117.8	114.0	109.3	104.8	100.2	95.6	92.7
72.5°	114.4	111.4	108.3	105.3	102.3	98.5	94.3	90.0	85.7	81.4	78.8
75°	90.7	87.9	85.2	82.4	79.7	76.4	72.5	68.7	64.8	61.0	58.9
77.5°	67.1	64.9	62.7	60.5	58.3	55.6	52.6	49.5	46.5	43.3	41.9
80°	53.6	51.4	49.2	47.0	44.8	42.4	39.9	37.3	34.7	32.1	31.3
82.5°	40.4	38.4	36.5	34.4	32.5	30.6	28.9	27.1	25.3	23.5	23.2
85°	22.6	21.0	19.4	17.7	16.1	15.0	14.5	14.1	13.6	13.2	13.1
87.5°	7.7	7.2	6.9	6.4	6.1	5.9	5.9	5.9	5.9	6.0	6.1
90°	0.4	0.9	1.4	2.0	2.6	3.1	3.6	4.1	4.5	5.1	5.4
92.5°	4.8	4.5	4.1	3.7	3.3	3.3	3.7	4.2	4.6	5.1	5.4
95°	17.9	17.7	17.6	17.3	17.1	15.7	13.0	10.3	7.7	5.1	5.4
97.5°	37.5	37.9	38.3	38.6	39.1	36.6	31.3	26.0	20.8	15.5	13.6
100°	52.6	52.9	53.1	53.2	53.5	53.7	54.0	54.3	54.6	54.8	44.4
102.5°	68.0	68.3	68.6	68.8	69.1	69.3	69.5	69.6	69.8	70.0	68.0
105°	92.6	92.9	93.3	93.5	93.8	93.9	93.9	93.9	93.9	93.9	93.9
107.5°	118.2	118.2	118.2	118.2	118.2	118.3	118.5	118.6	118.8	118.9	118.9
110°	134.9	134.9	134.9	134.9	134.9	135.0	135.1	135.3	135.4	135.5	135.4



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**CANDELA DISTRIBUTION (continued):**

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	150.5	150.7	150.9	151.1	151.2	151.3	151.4	151.5	151.6	151.7	151.4
115°	174.0	174.3	174.7	175.0	175.4	175.6	175.7	175.8	175.8	175.8	175.6
117.5°	198.2	198.2	198.2	198.2	198.2	198.3	198.6	198.9	199.1	199.4	199.0
120°	213.4	213.3	213.3	213.2	213.1	213.2	213.4	213.6	213.8	214.0	213.9
122.5°	226.8	227.0	227.3	227.6	227.8	228.0	228.1	228.2	228.3	228.4	228.3
125°	247.4	247.9	248.4	248.9	249.4	249.7	249.7	249.7	249.7	249.7	249.3
127.5°	267.2	267.5	267.9	268.2	268.6	268.8	268.7	268.7	268.6	268.6	268.4
130°	279.3	279.6	280.0	280.4	280.7	280.9	281.0	281.0	281.1	281.2	281.0
132.5°	291.4	291.8	292.2	292.6	293.0	293.1	293.0	292.8	292.7	292.5	292.5
135°	308.6	309.0	309.4	309.9	310.2	310.4	310.2	310.1	310.0	309.9	309.7
137.5°	324.4	324.8	325.1	325.5	325.8	326.0	325.8	325.7	325.6	325.5	325.5
140°	334.7	334.9	335.0	335.2	335.3	335.4	335.3	335.2	335.1	335.1	335.2
142.5°	344.1	344.2	344.3	344.3	344.4	344.5	344.6	344.7	344.8	344.9	344.9
145°	357.8	357.9	358.0	358.2	358.3	358.4	358.4	358.4	358.4	358.4	358.5
147.5°	369.7	369.7	369.7	369.6	369.6	369.6	369.7	369.8	369.9	370.0	370.1
150°	377.3	377.2	377.0	376.8	376.7	376.7	376.8	377.0	377.2	377.3	377.5
152.5°	384.6	384.3	384.0	383.7	383.3	383.3	383.4	383.6	383.7	383.9	384.0
155°	394.0	393.6	393.2	392.7	392.4	392.2	392.4	392.4	392.6	392.7	393.0
157.5°	401.3	401.0	400.7	400.5	400.3	400.1	400.1	400.2	400.2	400.2	400.4
160°	406.3	405.9	405.5	405.0	404.7	404.5	404.5	404.6	404.7	404.7	405.0
162.5°	410.4	409.9	409.5	409.0	408.7	408.5	408.6	408.6	408.7	408.8	409.1
165°	415.7	415.4	414.9	414.5	414.1	413.9	413.9	414.0	414.1	414.2	414.6
167.5°	419.8	419.4	418.9	418.5	418.0	417.9	417.9	418.0	418.1	418.1	418.7
170°	422.0	421.6	421.1	420.6	420.1	419.9	420.0	420.0	420.1	420.2	420.7
172.5°	423.6	423.1	422.6	422.1	421.6	421.4	421.5	421.7	421.8	422.0	422.4
175°	425.2	424.8	424.4	423.9	423.6	423.4	423.4	423.5	423.6	423.7	424.2
177.5°	426.0	425.6	425.3	425.0	424.6	424.5	424.5	424.6	424.6	424.7	425.1
180°	425.2	425.2	425.2	425.2	425.2	425.2	425.2	425.2	425.2	425.2	425.2



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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
0°	545.6	545.6	545.6	545.6	545.6	545.6	545.6	545.6
2.5°	543.8	544.6	545.3	545.6	545.5	545.5	545.4	545.3
5°	540.5	541.4	542.2	542.7	542.5	542.2	542.1	541.9
7.5°	533.7	534.4	535.0	535.2	535.0	534.8	534.7	534.4
10°	528.1	528.3	528.6	528.6	528.3	528.1	527.8	527.5
12.5°	520.0	520.2	520.4	520.3	519.9	519.4	519.1	518.6
15°	506.7	506.6	506.5	506.0	505.2	504.4	503.6	502.7
17.5°	490.2	489.7	489.3	488.7	488.0	487.3	486.6	486.0
20°	478.0	477.5	477.1	476.4	475.5	474.7	473.9	473.1
22.5°	465.8	464.9	464.0	463.2	462.6	461.9	461.3	460.6
25°	446.0	444.8	443.6	442.6	441.5	440.5	439.5	438.5
27.5°	424.5	422.8	421.2	419.9	418.9	417.9	417.0	416.0
30°	409.1	407.1	404.9	403.5	402.6	401.8	401.0	400.2
32.5°	394.2	391.9	389.5	387.9	386.8	385.8	384.7	383.7
35°	371.0	368.3	365.6	363.6	362.4	361.1	359.8	358.6
37.5°	346.6	343.5	340.3	338.0	336.8	335.6	334.3	333.1
40°	330.6	327.1	323.6	321.3	320.2	319.1	318.0	316.9
42.5°	314.7	311.4	308.0	305.6	304.0	302.3	300.7	299.1
45°	289.4	285.7	282.0	279.6	278.2	276.8	275.4	274.0
47.5°	264.4	260.6	256.8	254.1	252.6	251.1	249.6	248.1
50°	247.4	243.5	239.7	237.1	235.8	234.3	233.0	231.6
52.5°	231.3	227.2	223.0	220.3	218.9	217.6	216.2	214.8
55°	206.9	202.8	198.7	195.8	194.4	192.9	191.5	190.0
57.5°	182.4	178.4	174.3	171.7	170.4	169.1	167.8	166.5
60°	166.3	162.2	158.2	155.5	154.1	152.8	151.4	150.0
62.5°	150.3	146.6	142.9	140.4	138.9	137.6	136.3	134.8
65°	127.0	123.3	119.7	117.2	115.8	114.4	113.1	111.6
67.5°	104.7	101.4	98.0	95.8	94.7	93.6	92.5	91.4
70°	90.0	87.1	84.3	82.3	81.1	80.1	79.0	77.8
72.5°	76.2	73.6	71.0	69.3	68.6	67.9	67.1	66.3
75°	57.0	54.9	53.0	51.6	51.0	50.3	49.7	49.0
77.5°	40.6	39.1	37.7	36.7	36.3	35.8	35.3	34.9
80°	30.5	29.7	28.9	28.4	28.2	28.0	27.8	27.6
82.5°	22.8	22.4	22.0	21.8	21.7	21.6	21.5	21.3
85°	13.0	12.9	12.8	12.8	12.7	12.6	12.5	12.4
87.5°	6.1	6.2	6.2	6.2	6.2	6.2	6.2	6.2
90°	5.7	6.1	6.4	6.7	7.0	7.1	7.3	7.6
92.5°	5.7	6.1	6.4	6.7	6.8	6.9	7.0	7.0
95°	5.7	6.1	6.4	6.6	6.6	6.6	6.6	6.6
97.5°	11.6	9.5	7.6	6.6	6.6	6.6	6.6	6.6
100°	34.0	23.5	13.1	7.8	7.5	7.2	6.9	6.6
102.5°	66.0	64.0	62.1	58.7	53.9	49.2	44.4	39.7
105°	93.9	93.9	93.9	93.9	93.8	93.7	93.7	93.6
107.5°	119.0	119.0	119.0	118.9	118.7	118.4	118.2	118.0
110°	135.1	134.9	134.7	134.6	134.7	134.7	134.8	134.9





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**CANDELA DISTRIBUTION (continued):**

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	151.1	150.9	150.6	150.4	150.3	150.3	150.2	150.1
115°	175.3	175.0	174.8	174.4	174.0	173.6	173.2	172.7
117.5°	198.7	198.3	198.0	197.7	197.5	197.3	197.2	197.0
120°	213.7	213.6	213.5	213.2	212.9	212.5	212.1	211.8
122.5°	228.1	228.0	227.8	227.6	227.1	226.8	226.3	226.0
125°	249.1	248.8	248.5	248.3	248.1	247.9	247.6	247.4
127.5°	268.2	268.0	268.0	267.6	267.1	266.5	266.1	265.6
130°	280.7	280.5	280.4	280.0	279.7	279.4	279.0	278.7
132.5°	292.4	292.4	292.3	292.1	291.8	291.4	291.1	290.8
135°	309.6	309.4	309.2	309.0	308.6	308.2	307.7	307.3
137.5°	325.6	325.6	325.6	325.4	325.0	324.7	324.3	324.0
140°	335.4	335.5	335.6	335.5	335.1	334.7	334.2	333.8
142.5°	344.9	345.0	345.0	344.8	344.4	343.9	343.6	343.1
145°	358.6	358.6	358.6	358.5	358.1	357.7	357.2	356.8
147.5°	370.1	370.2	370.3	370.1	369.6	369.1	368.6	368.1
150°	377.6	377.7	377.8	377.6	377.1	376.6	375.9	375.4
152.5°	384.1	384.2	384.4	384.2	383.7	383.3	382.7	382.2
155°	393.2	393.3	393.6	393.4	392.9	392.3	391.7	391.2
157.5°	400.6	400.8	401.1	400.9	400.4	399.8	399.2	398.7
160°	405.3	405.6	405.8	405.7	405.1	404.6	404.0	403.5
162.5°	409.6	409.9	410.4	410.2	409.6	408.9	408.4	407.8
165°	415.0	415.4	415.9	415.8	415.3	414.6	414.1	413.6
167.5°	419.2	419.6	420.2	420.1	419.5	418.8	418.2	417.6
170°	421.2	421.9	422.4	422.4	421.8	421.2	420.4	419.8
172.5°	422.9	423.5	423.9	423.9	423.3	422.6	422.0	421.3
175°	424.7	425.3	425.9	425.9	425.2	424.5	423.9	423.3
177.5°	425.5	425.9	426.2	426.2	425.8	425.3	424.9	424.5
180°	425.2	425.2	425.2	425.2	425.2	425.2	425.2	425.2

(END OF REPORT)