

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: P333350-927

Luminaire Tested: **S125DIW-S375D770U927-4F0-1E-UDD-F**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P333350-927
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-S375D770U927-4F0-1E-UDD-F
Description: DEFINE 5 DIRECT-INDIRECT WALL MOUNT LED LUMINAIRE
DOWNLIGHT 375 LUMENS PER FOOT, FLUSH SATIN WHITE DIFFUSER
UPLIGHT 770 LUMENS PER FOOT, NO LENS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3637.4 lumens
Efficiency: N/A
Efficacy: 119.7 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

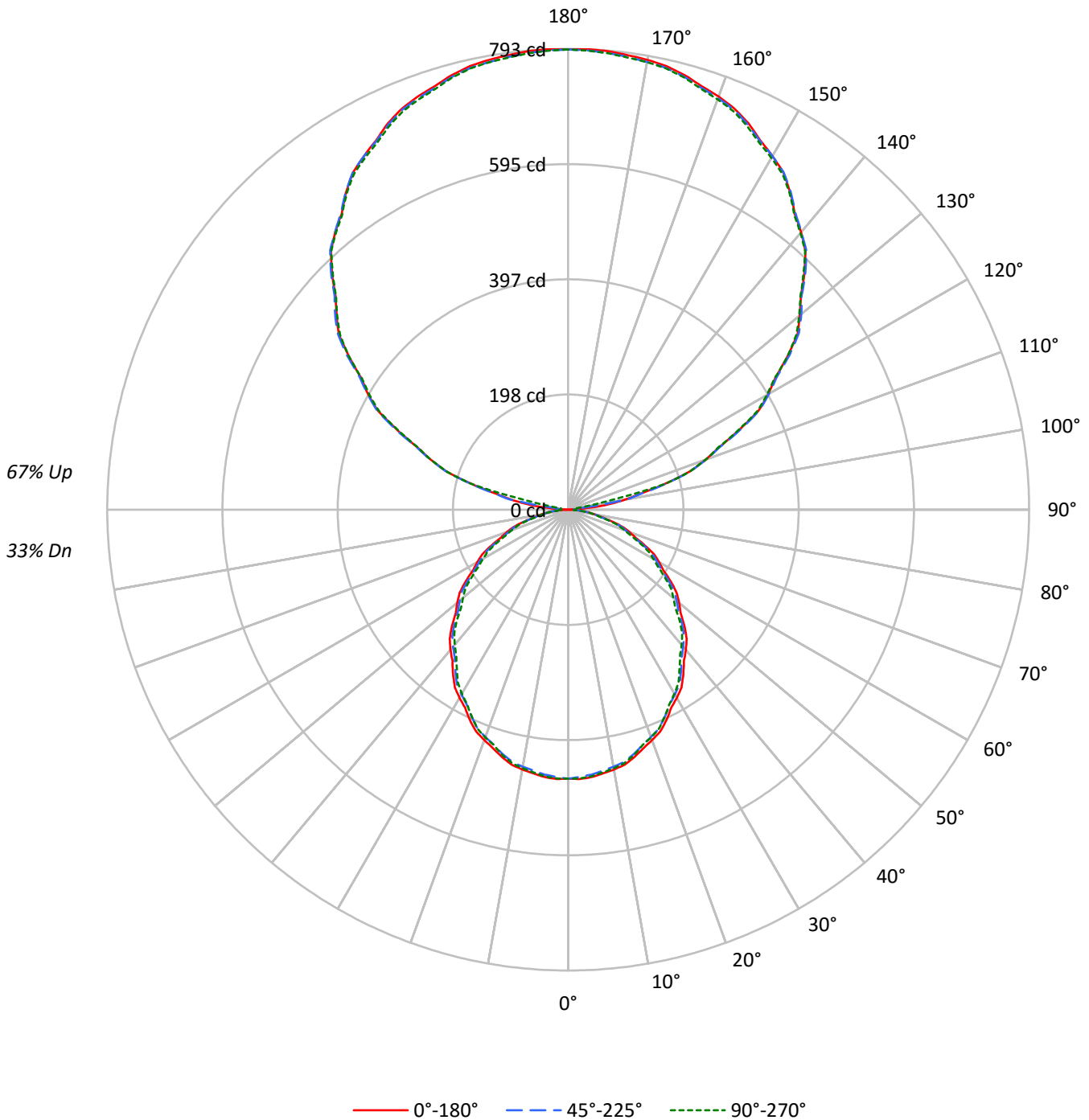
Input Watts (W): 30.4
Input Voltage (V): 120
Input Current (A_{in}): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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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	74	74	74	57	57	57	41	41	41	33
1	94	90	86	82	85	81	78	75	65	62	60	50	48	47	36	35	34	28
2	86	78	72	67	77	71	66	61	57	53	50	44	41	39	31	30	29	23
3	78	69	62	56	70	62	56	51	50	46	42	38	36	33	28	26	24	20
4	71	61	53	47	64	55	48	43	44	39	36	34	31	28	25	23	21	17
5	65	54	46	40	59	49	42	37	39	34	31	31	27	24	22	20	18	15
6	60	48	40	35	54	44	37	32	35	30	27	28	24	21	20	18	16	13
7	55	43	36	30	50	40	33	28	32	27	23	25	21	19	18	16	14	11
8	51	39	32	27	46	36	29	25	29	24	21	23	19	17	17	15	13	10
9	48	36	29	24	43	33	26	22	27	22	18	21	17	15	16	13	11	9
10	45	33	26	21	40	30	24	20	24	20	16	19	16	13	14	12	10	8

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	2989	2989	2989
5°	2995	2967	2986
10°	2977	2946	2963
15°	2945	2910	2923
20°	2899	2861	2866
25°	2849	2802	2799
30°	2788	2738	2725
35°	2722	2670	2633
40°	2655	2596	2559
45°	2582	2528	2478
50°	2502	2446	2372
55°	2423	2354	2288
60°	2331	2260	2180
65°	2222	2149	2077
70°	2115	2019	1949
75°	1926	1864	1799
80°	1715	1689	1648
85°	1489	1519	1438



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	43.6	1.2
10°-20°	123.3	3.4
20°-30°	182.0	5.0
30°-40°	212.4	5.8
40°-50°	213.3	5.9
50°-60°	187.2	5.1
60°-70°	139.5	3.8
70°-80°	79.8	2.2
80°-90°	24.8	0.7
90°-100°	28.8	0.8
100°-110°	177.3	4.9
110°-120°	321.6	8.8
120°-130°	412.8	11.3
130°-140°	444.0	12.2
140°-150°	416.7	11.5
150°-160°	337.1	9.3
160°-170°	218.0	6.0
170°-180°	75.2	2.1
0°-30°	348.9	9.6
0°-40°	561.2	15.4
0°-60°	961.7	26.4
0°-90°	1205.8	33.2
90°-120°	527.8	14.5
90°-150°	1801.3	49.5
90°-180°	2432.0	66.9
0°-180°	3637.4	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	463	463	463	463	463	
5°	462	461	458	461	461	44
15°	440	439	435	437	437	124
25°	400	398	393	394	393	184
35°	345	344	339	337	334	216
45°	283	281	277	273	271	218
55°	215	214	209	206	203	192
65°	145	144	141	137	136	144
75°	77	76	75	74	72	82
85°	20	20	20	20	19	23
90°	1	5	9	12	14	2
95°	33	31	9	12	12	43
105°	172	175	175	175	174	183
115°	324	327	328	325	322	321
125°	461	465	465	463	461	411
135°	575	578	577	576	572	443
145°	666	667	667	668	664	416
155°	734	730	731	733	728	338
165°	774	771	771	774	770	219
175°	792	789	789	793	788	75
180°	792	792	792	792	792	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	462.8	462.8	462.8	462.8	462.8	462.8	462.8	462.8	462.8	462.8	462.8
2.5°	463.9	463.7	463.6	463.3	463.2	462.7	462.1	461.4	460.8	460.1	460.8
5°	462.0	461.8	461.7	461.5	461.4	460.9	460.1	459.3	458.4	457.6	458.4
7.5°	457.8	457.6	457.5	457.3	457.2	456.6	455.7	454.8	453.9	453.0	453.8
10°	454.0	453.8	453.7	453.5	453.4	452.8	451.9	451.0	450.1	449.2	449.9
12.5°	449.3	449.0	448.7	448.5	448.1	447.6	446.7	445.9	445.0	444.3	444.7
15°	440.5	440.2	440.0	439.7	439.4	438.9	438.0	437.1	436.2	435.3	435.7
17.5°	430.2	429.9	429.5	429.2	428.8	428.2	427.2	426.4	425.4	424.5	425.0
20°	421.8	421.6	421.4	421.3	421.1	420.5	419.5	418.4	417.3	416.3	416.8
22.5°	413.3	413.0	412.6	412.4	412.1	411.5	410.4	409.5	408.4	407.5	407.9
25°	399.8	399.4	398.9	398.5	398.2	397.4	396.4	395.3	394.3	393.2	393.4
27.5°	384.0	383.8	383.6	383.3	383.1	382.4	381.4	380.2	379.1	378.0	378.1
30°	373.8	373.6	373.3	373.0	372.8	372.1	370.9	369.6	368.4	367.2	367.0
32.5°	362.7	362.3	361.9	361.6	361.2	360.4	359.3	358.2	357.2	356.1	355.8
35°	345.2	344.9	344.6	344.3	344.0	343.2	342.1	341.0	339.8	338.7	338.3
37.5°	327.2	326.8	326.4	325.9	325.5	324.8	323.7	322.7	321.5	320.5	319.9
40°	314.9	314.4	314.0	313.6	313.2	312.4	311.3	310.2	309.0	307.9	307.2
42.5°	301.7	301.3	301.0	300.6	300.3	299.6	298.4	297.3	296.1	295.0	294.4
45°	282.7	282.3	282.0	281.7	281.3	280.7	279.7	278.8	277.7	276.8	275.8
47.5°	262.1	262.1	262.1	262.2	262.2	261.7	260.5	259.3	258.1	256.9	256.0
50°	249.0	248.7	248.5	248.2	248.0	247.4	246.4	245.4	244.5	243.4	242.4
52.5°	235.5	235.3	235.1	235.0	234.8	234.2	233.1	232.1	231.0	230.0	229.1
55°	215.2	215.0	214.8	214.5	214.3	213.6	212.5	211.4	210.2	209.1	208.3
57.5°	194.0	193.8	193.7	193.6	193.5	192.9	191.9	191.0	190.0	189.1	188.1
60°	180.5	180.1	179.8	179.5	179.2	178.6	177.7	176.8	175.9	175.0	174.2
62.5°	166.4	166.2	165.9	165.6	165.4	164.9	164.1	163.3	162.6	161.8	161.0
65°	145.4	145.2	145.0	144.9	144.7	144.2	143.3	142.4	141.5	140.6	139.8
67.5°	124.9	124.6	124.2	123.9	123.6	123.0	122.4	121.7	121.0	120.4	119.8
70°	112.0	111.6	111.2	110.8	110.4	109.8	109.1	108.4	107.7	106.9	106.4
72.5°	98.0	97.7	97.4	97.1	96.9	96.5	96.0	95.5	95.1	94.6	94.0
75°	77.2	77.1	76.9	76.8	76.6	76.3	75.9	75.5	75.1	74.7	74.5
77.5°	58.1	58.1	58.0	57.9	57.9	57.8	57.5	57.3	57.0	56.8	56.6
80°	46.1	46.1	46.1	46.1	46.1	46.0	45.9	45.7	45.6	45.4	45.3
82.5°	35.6	35.5	35.3	35.2	35.1	35.0	34.9	34.9	34.9	34.9	34.7
85°	20.1	20.2	20.3	20.4	20.4	20.5	20.5	20.5	20.5	20.5	20.4
87.5°	8.0	8.2	8.5	8.6	8.9	9.0	9.1	9.3	9.3	9.5	9.6
90°	0.6	1.7	2.7	3.7	4.8	5.7	6.7	7.6	8.5	9.4	10.1
92.5°	9.0	8.3	7.6	6.8	6.1	6.2	7.0	7.8	8.6	9.4	10.1
95°	33.4	33.0	32.6	32.3	31.9	29.2	24.2	19.3	14.3	9.4	10.1
97.5°	69.9	70.6	71.3	71.9	72.6	68.1	58.3	48.5	38.7	28.9	25.2
100°	98.0	98.4	98.8	99.2	99.6	100.1	100.6	101.1	101.6	102.1	82.7
102.5°	126.7	127.1	127.7	128.2	128.7	129.0	129.4	129.7	130.0	130.3	126.7
105°	172.5	173.1	173.6	174.1	174.7	174.9	174.9	174.9	174.9	174.9	174.9
107.5°	220.2	220.2	220.2	220.2	220.2	220.4	220.6	220.9	221.2	221.4	221.4
110°	251.2	251.2	251.2	251.2	251.2	251.4	251.6	251.9	252.2	252.4	252.0



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	280.4	280.7	281.0	281.3	281.6	281.9	282.0	282.2	282.3	282.5	281.9
115°	324.0	324.6	325.3	326.0	326.6	327.0	327.2	327.3	327.4	327.6	327.0
117.5°	369.2	369.2	369.2	369.2	369.1	369.3	369.9	370.3	370.8	371.3	370.7
120°	397.4	397.3	397.1	397.0	396.9	397.0	397.4	397.8	398.2	398.5	398.3
122.5°	422.2	422.8	423.3	423.7	424.3	424.6	424.8	424.9	425.2	425.3	425.1
125°	460.8	461.7	462.6	463.5	464.5	464.9	464.9	464.9	464.9	464.9	464.4
127.5°	497.5	498.2	498.8	499.5	500.1	500.4	500.3	500.3	500.2	500.1	499.8
130°	520.1	520.7	521.3	522.0	522.7	523.1	523.2	523.3	523.5	523.6	523.2
132.5°	542.6	543.4	544.2	544.9	545.7	545.9	545.6	545.3	545.0	544.7	544.6
135°	574.6	575.4	576.2	577.0	577.8	578.1	577.8	577.5	577.3	577.0	576.7
137.5°	604.1	604.8	605.5	606.2	606.8	607.0	606.8	606.6	606.3	606.1	606.2
140°	623.4	623.6	623.9	624.2	624.4	624.5	624.3	624.2	624.1	623.9	624.2
142.5°	640.7	640.9	641.0	641.2	641.4	641.5	641.7	641.9	642.1	642.3	642.3
145°	666.2	666.5	666.8	667.0	667.3	667.4	667.4	667.4	667.4	667.4	667.5
147.5°	688.6	688.5	688.4	688.4	688.3	688.4	688.6	688.6	688.8	689.0	689.1
150°	702.6	702.3	702.1	701.8	701.6	701.6	701.8	702.1	702.3	702.6	702.9
152.5°	716.2	715.7	715.1	714.5	713.9	713.8	714.1	714.3	714.5	714.8	715.1
155°	733.7	732.9	732.1	731.3	730.6	730.3	730.6	730.9	731.1	731.3	731.7
157.5°	747.2	746.8	746.3	745.8	745.4	745.1	745.1	745.2	745.2	745.2	745.7
160°	756.6	755.8	755.0	754.2	753.5	753.1	753.3	753.4	753.5	753.7	754.2
162.5°	764.1	763.3	762.6	761.8	761.0	760.7	760.8	761.0	761.0	761.2	761.9
165°	774.2	773.4	772.7	771.9	771.1	770.8	770.9	771.0	771.2	771.3	772.1
167.5°	781.7	780.9	780.1	779.3	778.5	778.2	778.3	778.4	778.6	778.7	779.6
170°	786.0	785.1	784.1	783.2	782.3	781.9	782.0	782.2	782.3	782.4	783.5
172.5°	788.8	787.9	787.0	786.0	785.1	784.8	785.1	785.3	785.5	785.8	786.6
175°	791.9	791.1	790.3	789.5	788.7	788.4	788.5	788.6	788.8	788.9	790.0
177.5°	793.2	792.6	792.0	791.4	790.8	790.4	790.6	790.7	790.8	790.9	791.6
180°	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	462.8	462.8	462.8	462.8	462.8	462.8	462.8	462.8
2.5°	461.4	462.1	462.7	463.0	463.0	462.9	462.9	462.8
5°	459.1	459.9	460.6	460.9	460.8	460.7	460.7	460.6
7.5°	454.5	455.2	455.9	456.2	456.1	456.1	456.0	455.9
10°	450.5	451.1	451.9	452.1	452.0	451.9	451.9	451.8
12.5°	445.3	445.8	446.3	446.6	446.6	446.6	446.6	446.5
15°	436.1	436.5	437.0	437.1	437.1	437.1	437.1	437.1
17.5°	425.5	426.0	426.5	426.5	426.1	425.7	425.3	424.9
20°	417.4	418.0	418.5	418.7	418.2	417.8	417.4	417.0
22.5°	408.2	408.6	409.0	409.0	408.8	408.4	408.2	407.9
25°	393.6	393.7	393.9	393.8	393.6	393.3	393.1	392.8
27.5°	378.1	378.1	378.2	378.1	377.8	377.6	377.3	377.1
30°	366.9	366.7	366.5	366.4	366.1	365.9	365.6	365.4
32.5°	355.5	355.2	354.9	354.6	354.1	353.6	353.2	352.8
35°	337.9	337.5	337.0	336.5	335.9	335.2	334.5	333.9
37.5°	319.3	318.7	318.1	317.6	317.2	316.9	316.5	316.1
40°	306.4	305.7	305.0	304.5	304.3	304.0	303.7	303.5
42.5°	293.7	293.0	292.3	291.8	291.4	291.0	290.7	290.3
45°	274.8	273.9	272.9	272.3	272.0	271.8	271.6	271.3
47.5°	254.9	254.0	252.9	252.2	251.6	251.0	250.5	249.9
50°	241.4	240.3	239.2	238.4	237.8	237.3	236.7	236.1
52.5°	228.1	227.2	226.2	225.5	224.9	224.3	223.6	223.0
55°	207.6	206.8	206.1	205.5	204.9	204.3	203.7	203.2
57.5°	187.2	186.2	185.3	184.7	184.3	184.0	183.7	183.4
60°	173.4	172.5	171.7	171.0	170.5	169.9	169.4	168.8
62.5°	160.1	159.1	158.3	157.6	157.2	156.8	156.3	155.9
65°	139.1	138.4	137.7	137.1	136.8	136.5	136.2	135.9
67.5°	119.1	118.5	117.9	117.5	117.3	117.1	116.9	116.7
70°	105.9	105.4	105.0	104.6	104.3	103.9	103.5	103.2
72.5°	93.5	92.9	92.4	92.0	91.7	91.3	90.9	90.6
75°	74.2	74.0	73.7	73.4	73.1	72.8	72.5	72.1
77.5°	56.6	56.4	56.2	56.1	55.8	55.6	55.4	55.1
80°	45.2	45.2	45.1	44.9	44.8	44.6	44.4	44.3
82.5°	34.5	34.4	34.3	34.1	34.1	34.1	34.1	34.1
85°	20.4	20.3	20.2	20.0	19.9	19.7	19.6	19.4
87.5°	9.7	9.9	10.0	10.1	10.0	10.0	9.9	9.8
90°	10.7	11.3	12.0	12.5	12.9	13.3	13.7	14.1
92.5°	10.7	11.3	12.0	12.4	12.6	12.8	13.0	13.2
95°	10.7	11.3	12.0	12.4	12.4	12.4	12.4	12.4
97.5°	21.5	17.8	14.2	12.4	12.4	12.4	12.4	12.4
100°	63.3	43.8	24.4	14.4	13.9	13.4	12.8	12.4
102.5°	122.9	119.3	115.6	109.3	100.4	91.6	82.7	73.8
105°	174.9	174.9	174.9	174.8	174.8	174.6	174.4	174.4
107.5°	221.5	221.5	221.5	221.3	220.9	220.5	220.1	219.8
110°	251.6	251.2	250.8	250.7	250.8	251.0	251.1	251.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	281.5	281.0	280.4	280.1	280.0	279.8	279.6	279.4
115°	326.5	326.0	325.4	324.8	324.0	323.2	322.4	321.6
117.5°	369.9	369.3	368.6	368.1	367.7	367.4	367.1	366.8
120°	398.1	397.8	397.5	397.0	396.4	395.8	395.1	394.4
122.5°	424.8	424.5	424.3	423.7	423.0	422.2	421.5	420.7
125°	463.8	463.3	462.8	462.3	461.9	461.5	461.2	460.8
127.5°	499.6	499.2	499.0	498.4	497.3	496.4	495.4	494.5
130°	522.8	522.4	522.0	521.5	520.9	520.2	519.5	518.9
132.5°	544.5	544.5	544.4	544.1	543.4	542.7	542.1	541.5
135°	576.5	576.2	576.0	575.4	574.6	573.9	573.1	572.3
137.5°	606.3	606.3	606.3	606.0	605.3	604.7	604.0	603.3
140°	624.5	624.7	625.0	624.7	623.9	623.2	622.4	621.6
142.5°	642.4	642.5	642.5	642.1	641.4	640.6	639.8	639.0
145°	667.7	667.8	667.9	667.6	666.8	666.0	665.3	664.5
147.5°	689.3	689.4	689.6	689.2	688.3	687.4	686.4	685.5
150°	703.1	703.4	703.7	703.3	702.2	701.2	700.1	699.1
152.5°	715.3	715.6	715.9	715.5	714.5	713.7	712.7	711.8
155°	732.1	732.5	732.9	732.6	731.6	730.6	729.5	728.4
157.5°	746.1	746.5	746.9	746.6	745.5	744.5	743.5	742.4
160°	754.7	755.3	755.7	755.5	754.5	753.4	752.4	751.3
162.5°	762.6	763.3	764.1	763.9	762.8	761.6	760.5	759.3
165°	772.9	773.6	774.4	774.3	773.2	772.2	771.2	770.1
167.5°	780.5	781.5	782.4	782.4	781.2	780.0	778.8	777.6
170°	784.5	785.6	786.6	786.6	785.4	784.2	783.0	781.9
172.5°	787.6	788.5	789.5	789.3	788.2	787.0	785.8	784.7
175°	791.0	792.0	793.1	793.0	791.9	790.7	789.5	788.3
177.5°	792.3	793.1	793.8	793.8	792.9	792.1	791.2	790.4
180°	791.9	791.9	791.9	791.9	791.9	791.9	791.9	791.9

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