

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: P334976

Luminaire Tested: **S125IP-S590U840-4F0-1E-UDD-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334976
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125IP-S590U840-4F0-1E-UDD-4
Description: DEFINE 5 INDIRECT LED LUMINAIRE, BATWING OPTIC
PENDANT MOUNT, 590 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2147.2 lumens
Efficiency: N/A
Efficacy: 114.2 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Indirect

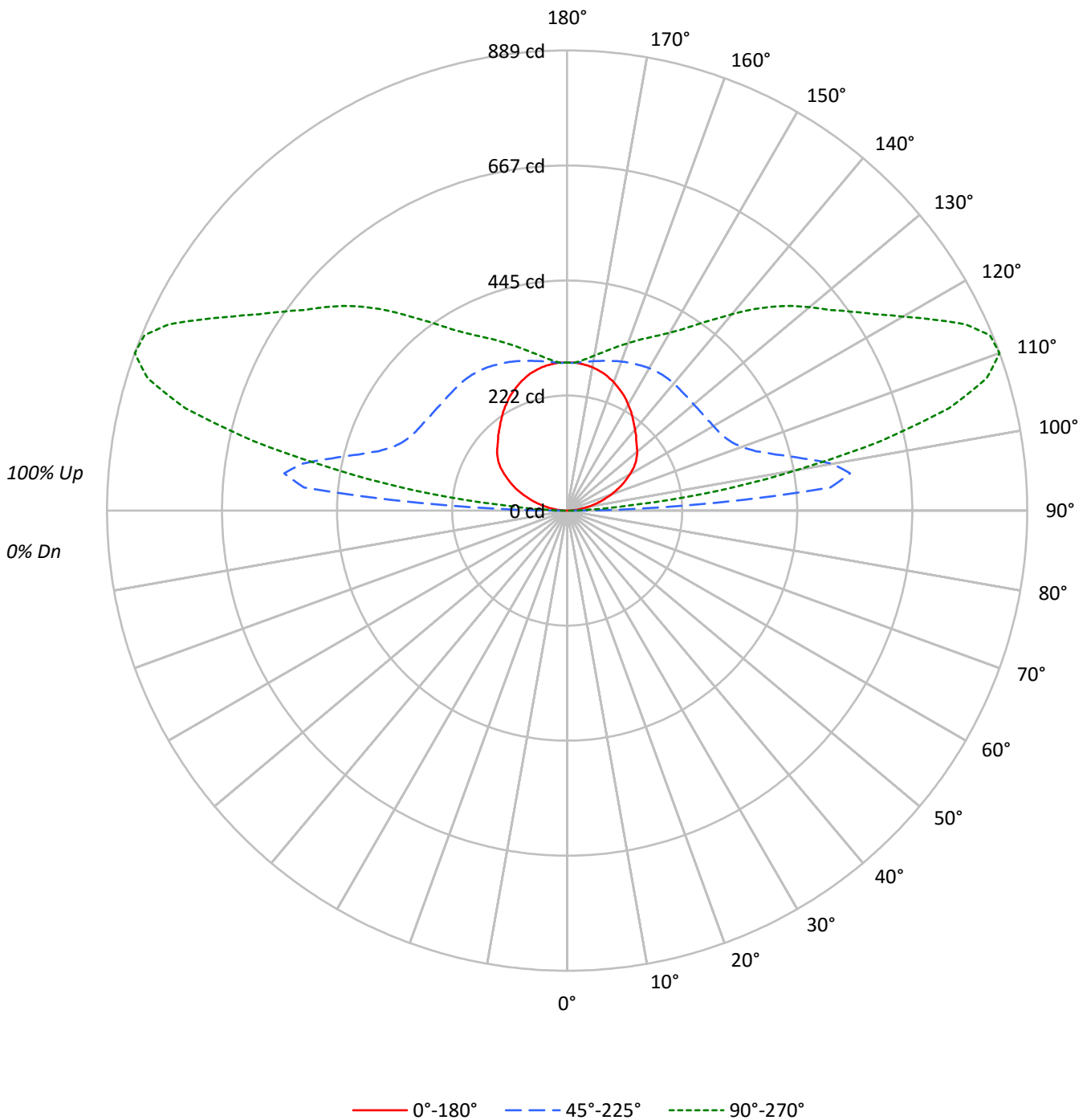
Input Watts (W): 18.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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	95	95	95	95	81	81	81	81	56	56	56	32	32	32	10	10	10	0
1	87	83	79	76	74	71	68	65	48	47	45	28	27	26	9	9	8	0
2	79	72	66	62	67	62	57	53	42	40	37	24	23	22	8	7	7	0
3	72	63	56	51	61	54	49	44	37	34	31	21	20	18	7	6	6	0
4	65	56	48	43	56	48	42	37	33	29	26	19	17	16	6	6	5	0
5	60	49	42	36	51	42	36	32	29	25	22	17	15	13	5	5	4	0
6	55	44	36	31	47	38	32	27	26	22	19	15	13	11	5	4	4	0
7	50	39	32	27	43	34	28	23	23	19	17	14	11	10	4	4	3	0
8	47	35	28	23	40	30	24	20	21	17	14	12	10	9	4	3	3	0
9	43	32	25	20	37	27	22	18	19	15	13	11	9	8	4	3	3	0
10	40	29	22	18	34	25	19	16	17	14	11	10	8	7	3	3	2	0

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	0	0	0
5°	0	0	0
10°	0	0	0
15°	0	0	0
20°	0	0	0
25°	0	0	0
30°	0	0	0
35°	0	0	0
40°	0	0	0
45°	0	0	0
50°	0	0	0
55°	0	0	0
60°	0	0	0
65°	0	0	0
70°	0	0	0
75°	0	0	0
80°	0	0	0
85°	0	0	0



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	0.0	0.0
10°-20°	0.0	0.0
20°-30°	0.0	0.0
30°-40°	0.0	0.0
40°-50°	0.0	0.0
50°-60°	0.0	0.0
60°-70°	0.0	0.0
70°-80°	0.0	0.0
80°-90°	1.1	0.1
90°-100°	207.8	9.7
100°-110°	448.2	20.9
110°-120°	417.8	19.5
120°-130°	338.4	15.8
130°-140°	271.7	12.7
140°-150°	205.0	9.5
150°-160°	144.3	6.7
160°-170°	85.1	4.0
170°-180°	27.7	1.3
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	1.1	0.1
90°-120°	1073.9	50.0
90°-150°	1889.0	88.0
90°-180°	2146.0	99.9
0°-180°	2147.2	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	0	0	0	0	0	
5°	0	0	0	0	0	0
15°	0	0	0	0	0	0
25°	0	0	0	0	0	0
35°	0	0	0	0	0	0
45°	0	0	0	0	0	0
55°	0	0	0	0	0	0
65°	0	0	0	0	0	0
75°	0	0	0	0	0	0
85°	0	0	0	0	0	0
90°	1	5	9	12	13	1
95°	19	56	510	232	135	20
105°	65	91	418	822	763	69
115°	116	140	335	723	850	115
125°	161	189	321	575	670	143
135°	189	227	319	482	556	147
145°	220	252	320	399	439	138
155°	251	270	312	353	368	116
165°	274	282	300	318	323	77
175°	285	285	288	291	290	27
180°	286	286	286	286	286	



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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
0°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.6	1.2	2.3	3.5	4.6	5.8	6.3	7.5	8.1	9.2	9.8
92.5°	8.6	10.4	16.1	24.8	36.9	57.6	96.8	162.4	233.9	229.8	185.5
95°	19.0	19.6	24.2	30.5	43.2	69.1	130.8	257.5	416.5	510.4	499.4
97.5°	29.4	30.0	33.4	39.7	51.3	70.3	112.9	210.3	381.9	551.3	623.9
100°	40.3	41.5	43.8	50.1	61.1	78.3	111.8	186.6	331.8	520.2	664.2
102.5°	52.4	53.0	54.7	61.6	71.4	88.1	116.9	176.8	293.8	465.5	640.0
105°	65.1	65.1	68.0	73.7	83.0	99.1	124.4	175.7	271.9	417.6	583.0
107.5°	77.2	78.3	81.2	85.8	95.6	110.0	134.8	179.7	260.4	381.9	528.8
110°	90.4	91.6	93.9	99.1	107.7	122.7	146.3	186.1	255.8	358.3	483.9



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	103.7	104.8	106.6	111.8	120.4	134.8	157.3	194.1	255.8	344.5	450.5
115°	116.4	117.5	119.2	124.4	133.1	147.5	168.8	202.2	257.5	335.3	428.0
117.5°	127.9	129.6	131.3	136.5	146.3	160.1	180.3	211.4	260.4	330.1	413.0
120°	139.4	141.1	143.4	148.6	158.4	172.8	193.0	220.6	265.0	326.6	400.9
122.5°	151.5	152.7	154.4	159.6	170.5	184.9	205.1	231.0	269.0	323.7	390.6
125°	161.3	162.4	165.3	170.5	181.5	196.4	215.4	240.2	273.6	321.4	381.3
127.5°	169.4	171.1	174.5	180.9	192.4	207.4	225.8	248.9	278.8	320.3	372.7
130°	176.8	178.6	183.2	190.7	202.8	217.7	235.6	257.5	283.4	319.1	364.1
132.5°	182.6	184.9	190.7	199.3	212.0	227.0	244.8	265.0	288.6	319.1	357.2
135°	188.9	191.3	198.2	207.4	219.5	235.0	252.9	271.9	293.2	319.1	352.0
137.5°	197.0	198.7	205.1	214.3	226.4	242.5	258.6	277.1	297.8	319.7	346.8
140°	203.9	205.7	212.6	221.8	232.7	248.3	265.0	282.3	300.7	320.3	343.3
142.5°	212.0	213.1	219.5	228.7	239.1	253.5	269.0	285.1	302.4	320.9	340.4
145°	220.1	221.2	227.0	235.0	245.4	258.6	273.6	288.0	303.6	320.3	337.6
147.5°	228.7	229.3	234.5	241.9	251.2	263.3	276.5	289.8	304.2	319.1	334.7
150°	236.2	237.3	241.4	248.9	256.9	266.7	279.4	291.5	304.2	317.4	331.2
152.5°	244.2	244.8	248.3	254.6	262.1	270.7	282.3	292.6	303.6	315.1	327.2
155°	251.2	251.2	254.6	260.4	266.1	274.2	284.0	293.2	302.4	312.2	322.6
157.5°	257.5	257.5	260.4	265.6	270.7	277.1	285.7	293.8	301.3	309.3	318.6
160°	263.8	263.3	265.6	269.6	274.2	279.4	286.9	293.8	299.5	306.5	313.4
162.5°	269.0	268.4	270.7	274.2	277.7	281.7	288.0	293.2	297.8	303.0	308.8
165°	274.2	273.1	274.8	277.7	280.0	283.4	288.0	292.6	296.1	299.5	304.2
167.5°	277.7	277.1	278.2	280.0	281.7	284.0	288.0	291.5	293.2	296.1	299.5
170°	281.1	280.5	281.1	282.3	283.4	285.1	288.0	290.3	291.5	293.2	295.5
172.5°	283.4	282.3	282.8	284.0	284.6	285.1	287.5	289.2	289.2	289.8	291.5
175°	285.1	284.0	284.6	285.1	285.1	285.1	286.9	288.0	287.5	287.5	288.0
177.5°	286.3	285.1	285.1	285.7	285.1	285.1	286.3	286.9	285.7	285.7	286.3
180°	285.7	285.7	285.7	285.7	285.7	285.7	285.7	285.7	285.7	285.7	285.7



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
0°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
15°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
22.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
35°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
37.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
40°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
42.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
47.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
50°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
52.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
55°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
57.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
60°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
62.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
65°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
67.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
70°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
72.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
75°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	10.4	10.9	11.5	12.7	12.7	12.7	13.2	13.2
92.5°	125.0	89.9	66.8	55.9	46.7	44.9	43.8	42.6
95°	414.2	326.6	255.8	207.4	166.5	149.2	144.6	135.4
97.5°	593.9	524.2	452.8	383.7	349.1	319.1	303.6	296.7
100°	708.5	680.3	621.0	561.1	521.3	479.9	458.5	449.3
102.5°	747.1	775.9	755.2	719.5	676.3	649.8	626.2	619.8
105°	721.2	800.1	825.5	819.2	800.7	781.7	770.2	763.3
107.5°	668.2	772.5	833.6	858.9	864.1	861.2	855.4	849.7
110°	608.3	717.8	799.0	848.0	873.9	884.8	888.9	888.9



TEST NUMBER: P334976

CATALOG NUMBER: S125IP-S590U840-4F0-1E-UDD-4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	561.1	663.6	746.0	805.9	846.8	867.5	879.1	884.2
115°	523.1	612.3	691.3	754.1	799.0	826.6	842.8	850.3
117.5°	496.6	575.5	644.6	703.9	749.4	778.3	794.4	799.0
120°	475.8	544.9	608.3	659.0	701.6	729.3	744.8	749.4
122.5°	460.3	523.1	577.8	624.4	661.3	686.1	701.6	705.7
125°	445.3	504.0	554.2	595.6	627.9	651.5	664.2	670.0
127.5°	429.7	485.6	532.9	572.0	601.4	622.7	634.8	637.1
130°	415.3	466.0	511.0	548.4	577.2	596.2	607.7	611.2
132.5°	400.9	447.6	487.3	523.1	551.9	570.9	581.2	585.3
135°	388.8	428.6	465.5	498.3	523.6	542.6	553.0	556.5
137.5°	377.9	411.3	443.0	471.8	494.8	512.7	522.5	526.5
140°	369.3	396.3	422.8	447.0	468.3	483.3	492.0	494.8
142.5°	361.8	383.7	405.5	425.7	443.0	455.1	463.1	465.5
145°	355.4	373.3	391.1	406.7	420.5	430.3	436.6	439.0
147.5°	349.1	364.1	378.5	390.6	402.1	410.2	414.2	415.3
150°	343.9	356.6	367.5	377.9	386.5	393.4	395.7	396.3
152.5°	338.1	349.1	358.9	366.4	373.3	378.5	380.8	381.3
155°	332.4	341.6	349.7	356.0	361.8	365.8	367.5	368.1
157.5°	326.6	334.7	341.0	346.2	350.8	354.3	356.0	356.0
160°	320.9	326.6	332.4	336.4	340.4	343.3	344.5	343.9
162.5°	314.5	319.7	324.3	327.8	330.7	333.0	333.0	333.0
165°	308.8	312.8	316.3	319.1	321.4	322.6	322.6	322.6
167.5°	303.0	305.9	308.8	311.1	312.2	313.4	312.8	312.8
170°	298.4	300.1	301.9	303.0	304.2	304.7	304.7	304.2
172.5°	293.2	294.9	296.1	296.7	296.7	297.8	296.7	296.1
175°	289.8	289.8	290.9	290.9	290.9	291.5	290.3	289.8
177.5°	286.9	287.5	287.5	287.5	286.9	287.5	285.7	285.7
180°	285.7	285.7	285.7	285.7	285.7	285.7	285.7	285.7

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