

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: P334461

Luminaire Tested: **S122IP-S530U930-4F0-1E-UDD-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334461
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-16)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S122IP-S530U930-4F0-1E-UDD-4
Description: DEFINE 2 INDIRECT LED LUMINAIRE, BATWING OPTIC
PENDANT MOUNT, 530 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

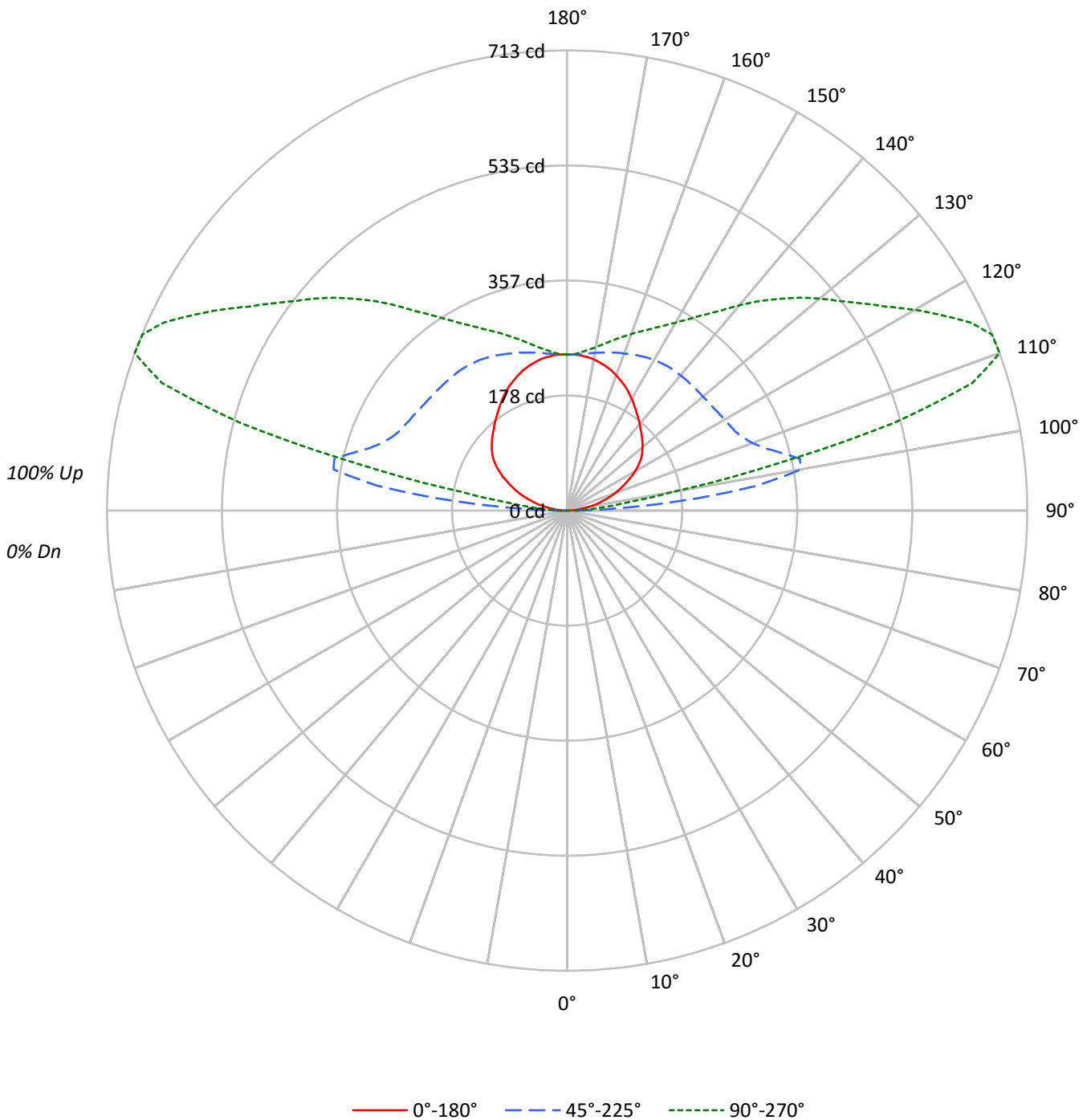
Lumens per Lamp: N/A
Luminaire Lumens: 1685.3 lumens
Efficiency: N/A
Efficacy: 89.6 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Indirect

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°	1.6	0.1
90°-100°	94.2	5.6
100°-110°	331.9	19.7
110°-120°	348.6	20.7
120°-130°	286.8	17.0
130°-140°	230.4	13.7
140°-150°	174.0	10.3
150°-160°	122.3	7.3
160°-170°	72.0	4.3
170°-180°	23.4	1.4
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	1.6	0.1
90°-120°	774.8	46.0
90°-150°	1466.0	87.0
90°-180°	1684.0	99.9
0°-180°	1685.3	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°	0	6	16	15	15	1
95°	16	40	182	69	53	17
105°	57	86	344	616	524	60
115°	100	126	288	595	690	99
125°	140	165	277	482	559	124
135°	164	195	274	405	464	126
145°	187	215	272	338	370	117
155°	212	229	265	299	311	98
165°	232	238	253	269	273	65
175°	241	242	244	247	246	23
180°	242	242	242	242	242	



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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°	0.5	1.9	3.7	4.6	5.6	7.0	9.3	12.6	15.3	15.8	15.3
92.5°	7.0	9.8	13.5	15.8	19.5	24.6	37.2	54.9	70.7	71.6	60.0
95°	16.3	18.1	22.8	27.0	34.4	45.6	67.0	107.4	161.3	182.3	159.5
97.5°	24.2	27.0	32.1	38.1	46.5	59.0	86.5	142.7	229.7	297.1	299.4
100°	35.8	37.2	41.4	48.8	58.1	71.1	95.8	152.5	252.9	367.3	434.3
102.5°	46.5	47.4	51.6	59.0	68.8	81.8	104.1	153.0	244.1	369.6	484.5
105°	56.7	58.6	61.8	68.8	79.0	92.1	113.9	155.3	232.0	344.5	468.2
107.5°	67.9	69.3	72.5	79.0	89.3	102.3	123.7	160.4	225.5	321.3	433.8
110°	79.0	80.9	83.7	89.7	99.5	113.0	133.4	166.9	223.6	305.5	401.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	89.3	91.1	94.4	100.0	109.3	123.2	142.7	173.9	224.1	295.2	379.4
115°	100.0	102.3	105.1	110.7	120.0	132.5	152.5	180.9	226.0	288.3	361.7
117.5°	111.1	113.0	115.8	120.9	129.7	142.7	161.3	188.3	228.8	284.6	349.6
120°	121.4	123.2	126.0	130.2	139.5	152.5	170.6	195.7	231.5	281.3	340.3
122.5°	131.1	132.5	135.3	140.0	149.3	162.7	179.5	202.3	234.8	279.4	332.4
125°	139.5	140.9	143.7	149.3	158.5	171.6	188.3	209.2	238.1	277.1	325.0
127.5°	146.5	148.3	152.0	158.1	166.9	180.4	196.7	215.7	241.3	275.7	318.0
130°	152.5	154.4	159.0	165.5	174.8	187.8	204.1	221.8	245.0	274.8	311.1
132.5°	158.1	160.4	165.5	172.5	182.3	195.3	210.6	227.8	248.8	274.3	305.5
135°	163.7	165.5	171.1	178.1	188.8	201.8	216.7	232.9	251.5	273.9	300.4
137.5°	168.8	171.1	176.7	184.1	194.8	206.9	221.8	237.1	254.3	273.9	296.6
140°	174.8	176.7	182.3	189.7	199.9	212.0	226.0	240.4	256.2	273.4	293.4
142.5°	180.9	182.3	187.4	194.8	204.6	215.7	229.2	243.2	257.6	273.4	290.1
145°	186.9	188.8	193.4	200.4	209.7	219.9	232.5	245.5	258.5	272.5	287.3
147.5°	193.4	194.8	199.5	206.0	213.9	223.2	235.3	246.9	259.0	271.1	284.6
150°	199.9	201.3	205.0	211.1	218.1	226.4	237.1	247.8	258.5	269.7	280.8
152.5°	206.4	206.9	210.6	215.7	222.2	229.7	239.0	248.3	257.6	267.3	277.6
155°	212.5	212.9	215.7	220.9	226.0	232.9	240.8	248.8	256.7	264.6	273.4
157.5°	217.6	218.1	220.4	225.0	229.2	235.3	242.2	248.8	254.8	261.8	269.7
160°	222.7	223.2	225.0	228.8	232.5	237.6	243.2	248.8	253.4	259.0	265.5
162.5°	227.8	227.4	229.2	232.0	235.3	239.0	243.6	248.3	252.0	256.7	261.8
165°	231.5	231.1	232.0	234.8	237.1	239.9	244.1	247.4	250.1	253.4	257.6
167.5°	234.8	234.3	235.3	237.1	239.0	240.8	244.1	246.9	248.3	250.6	253.4
170°	238.1	237.1	237.6	239.0	239.9	241.3	243.6	246.0	246.9	248.3	250.1
172.5°	239.9	239.5	239.0	240.4	240.8	241.8	243.2	244.6	245.0	245.5	246.9
175°	241.3	240.8	240.4	241.3	241.3	241.8	242.7	243.6	243.2	243.6	244.1
177.5°	242.2	241.3	240.8	241.8	241.8	241.8	242.2	243.2	242.2	241.8	242.2
180°	241.8	241.8	241.8	241.8	241.8	241.8	241.8	241.8	241.8	241.8	241.8



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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°	14.9	13.9	14.9	15.3	15.3	15.3	15.3	15.3
92.5°	47.0	40.0	34.9	31.2	30.7	28.8	29.3	28.4
95°	121.8	93.5	73.9	63.7	57.7	53.9	52.5	53.0
97.5°	249.2	199.0	152.0	124.1	106.0	96.7	91.6	88.8
100°	424.5	366.8	303.2	246.9	208.3	188.3	174.8	166.5
102.5°	539.3	537.5	495.2	434.7	392.0	354.3	336.6	324.5
105°	564.9	617.5	623.5	608.2	579.3	550.5	530.5	524.0
107.5°	537.5	615.6	661.2	679.8	679.3	675.1	669.1	658.4
110°	499.8	583.1	642.6	680.7	700.7	709.5	713.7	713.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	465.4	544.5	609.1	654.2	683.9	700.2	709.1	712.3
115°	438.5	510.1	571.0	618.9	651.9	673.3	685.3	689.5
117.5°	416.1	480.3	537.0	582.6	616.5	639.3	651.9	655.1
120°	400.3	458.0	507.3	549.6	582.1	604.0	617.5	622.1
122.5°	387.8	439.4	485.4	522.6	551.0	572.4	584.0	587.7
125°	375.7	423.6	464.5	499.4	526.3	544.0	555.6	559.3
127.5°	363.6	407.8	446.8	479.4	503.1	519.8	530.0	532.8
130°	352.0	392.0	428.7	459.4	482.2	498.0	507.3	511.0
132.5°	340.8	377.1	410.1	438.5	460.8	476.6	484.9	488.2
135°	330.6	361.3	392.0	418.0	438.0	453.3	461.7	463.6
137.5°	322.2	348.7	373.8	397.1	416.1	429.6	437.1	439.8
140°	314.3	336.6	358.0	378.5	393.4	405.4	412.4	415.2
142.5°	307.8	325.9	343.6	359.9	373.8	384.5	390.6	390.6
145°	301.8	317.1	331.5	345.0	356.2	364.1	368.7	370.1
147.5°	297.1	309.7	321.3	331.5	341.3	347.8	351.0	352.0
150°	292.0	302.2	312.0	320.4	327.3	332.9	335.7	336.2
152.5°	286.9	296.2	304.1	311.1	316.2	320.8	322.7	322.7
155°	282.2	289.7	296.6	301.8	306.9	310.1	312.0	311.1
157.5°	276.6	283.2	289.2	293.4	297.1	299.9	300.8	300.8
160°	271.5	276.6	281.8	285.0	288.3	290.6	291.1	291.1
162.5°	266.4	270.6	274.8	277.1	280.4	281.8	282.2	281.8
165°	261.3	264.6	267.8	269.7	271.5	273.4	273.4	272.9
167.5°	256.2	259.0	261.3	263.2	264.1	265.0	265.0	264.6
170°	252.5	253.9	255.7	256.7	257.1	258.5	258.1	257.1
172.5°	248.3	249.2	250.6	251.1	251.5	252.0	251.5	251.1
175°	245.5	246.0	246.4	246.9	246.9	247.4	246.9	246.0
177.5°	243.2	243.2	243.6	243.6	243.6	243.6	243.2	242.2
180°	241.8	241.8	241.8	241.8	241.8	241.8	241.8	241.8

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