

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: P334991

Luminaire Tested: **S125IP-S590U935-4F0-1E-UDD-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334991
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-S590U935-4F0-1E-UDD-4
Description: DEFINE 5 INDIRECT LED LUMINAIRE, BATWING OPTIC
PENDANT MOUNT, 590 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 1830.7 lumens
Efficiency: N/A
Efficacy: 97.4 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Indirect

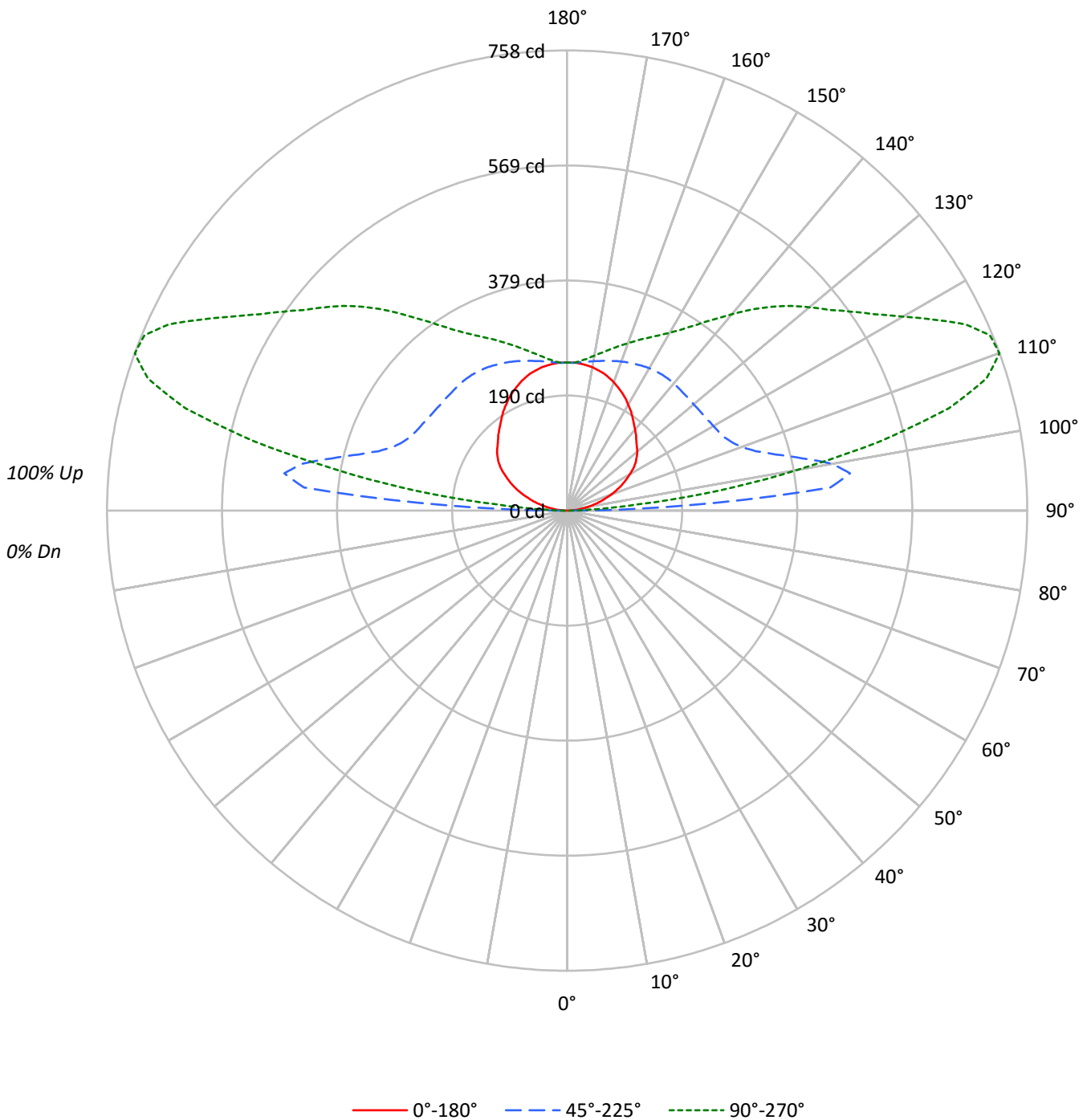
Input Watts (W): 18.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	1.0	0.1
90°-100°	177.2	9.7
100°-110°	382.1	20.9
110°-120°	356.3	19.5
120°-130°	288.5	15.8
130°-140°	231.7	12.7
140°-150°	174.7	9.5
150°-160°	123.1	6.7
160°-170°	72.5	4.0
170°-180°	23.6	1.3
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	1.0	0.1
90°-120°	915.6	50.0
90°-150°	1610.5	88.0
90°-180°	1830.0	100.0
0°-180°	1830.7	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	4	8	10	11	1
95°	16	48	435	197	115	17
105°	56	78	356	701	651	58
115°	99	120	286	616	725	98
125°	138	161	274	490	571	122
135°	161	194	272	411	474	125
145°	188	215	273	340	374	118
155°	214	230	266	301	314	99
165°	234	240	255	271	275	66
175°	243	243	245	248	247	23
180°	244	244	244	244	244	



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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	1.0	2.0	2.9	3.9	4.9	5.4	6.4	6.9	7.9	8.3
92.5°	7.4	8.8	13.8	21.1	31.4	49.1	82.5	138.5	199.4	196.0	158.1
95°	16.2	16.7	20.6	26.0	36.8	58.9	111.5	219.5	355.1	435.1	425.8
97.5°	25.0	25.5	28.5	33.9	43.7	59.9	96.3	179.3	325.6	470.0	531.9
100°	34.4	35.4	37.3	42.7	52.1	66.8	95.3	159.1	282.9	443.5	566.3
102.5°	44.7	45.2	46.7	52.6	60.9	75.1	99.7	150.8	250.5	396.8	545.7
105°	55.5	55.5	58.0	62.9	70.7	84.5	106.1	149.8	231.8	356.1	497.0
107.5°	65.8	66.8	69.3	73.2	81.5	93.8	114.9	153.2	222.0	325.6	450.9
110°	77.1	78.1	80.1	84.5	91.8	104.6	124.7	158.6	218.1	305.5	412.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	88.4	89.4	90.9	95.3	102.6	114.9	134.1	165.5	218.1	293.7	384.1
115°	99.2	100.2	101.7	106.1	113.5	125.7	143.9	172.4	219.5	285.8	364.9
117.5°	109.0	110.5	112.0	116.4	124.7	136.5	153.7	180.2	222.0	281.4	352.1
120°	118.9	120.3	122.3	126.7	135.1	147.3	164.5	188.1	225.9	278.5	341.8
122.5°	129.2	130.2	131.6	136.0	145.4	157.7	174.8	196.9	229.4	276.0	333.0
125°	137.5	138.5	141.0	145.4	154.7	167.5	183.7	204.8	233.3	274.1	325.1
127.5°	144.4	145.9	148.8	154.2	164.0	176.8	192.5	212.2	237.7	273.1	317.8
130°	150.8	152.3	156.2	162.6	172.9	185.7	200.9	219.5	241.6	272.1	310.4
132.5°	155.7	157.7	162.6	169.9	180.7	193.5	208.7	225.9	246.1	272.1	304.5
135°	161.1	163.1	169.0	176.8	187.1	200.4	215.6	231.8	250.0	272.1	300.1
137.5°	168.0	169.4	174.8	182.7	193.0	206.8	220.5	236.2	253.9	272.6	295.7
140°	173.9	175.3	181.2	189.1	198.4	211.7	225.9	240.7	256.4	273.1	292.7
142.5°	180.7	181.7	187.1	195.0	203.8	216.1	229.4	243.1	257.8	273.6	290.3
145°	187.6	188.6	193.5	200.4	209.2	220.5	233.3	245.6	258.8	273.1	287.8
147.5°	195.0	195.5	199.9	206.3	214.1	224.5	235.7	247.0	259.3	272.1	285.4
150°	201.4	202.3	205.8	212.2	219.0	227.4	238.2	248.5	259.3	270.6	282.4
152.5°	208.2	208.7	211.7	217.1	223.5	230.8	240.7	249.5	258.8	268.7	279.0
155°	214.1	214.1	217.1	222.0	226.9	233.8	242.1	250.0	257.8	266.2	275.0
157.5°	219.5	219.5	222.0	226.4	230.8	236.2	243.6	250.5	256.9	263.7	271.6
160°	224.9	224.5	226.4	229.9	233.8	238.2	244.6	250.5	255.4	261.3	267.2
162.5°	229.4	228.9	230.8	233.8	236.7	240.2	245.6	250.0	253.9	258.3	263.3
165°	233.8	232.8	234.3	236.7	238.7	241.6	245.6	249.5	252.4	255.4	259.3
167.5°	236.7	236.2	237.2	238.7	240.2	242.1	245.6	248.5	250.0	252.4	255.4
170°	239.7	239.2	239.7	240.7	241.6	243.1	245.6	247.5	248.5	250.0	252.0
172.5°	241.6	240.7	241.1	242.1	242.6	243.1	245.1	246.6	246.6	247.0	248.5
175°	243.1	242.1	242.6	243.1	243.1	243.1	244.6	245.6	245.1	245.1	245.6
177.5°	244.1	243.1	243.1	243.6	243.1	243.1	244.1	244.6	243.6	243.6	244.1
180°	243.6	243.6	243.6	243.6	243.6	243.6	243.6	243.6	243.6	243.6	243.6



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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°	8.8	9.3	9.8	10.8	10.8	10.8	11.3	11.3
92.5°	106.6	76.6	57.0	47.6	39.8	38.3	37.3	36.3
95°	353.1	278.5	218.1	176.8	141.9	127.2	123.3	115.4
97.5°	506.4	446.9	386.0	327.1	297.6	272.1	258.8	252.9
100°	604.1	580.0	529.4	478.4	444.5	409.1	390.9	383.1
102.5°	637.0	661.6	643.9	613.4	576.6	554.0	533.9	528.5
105°	614.9	682.2	703.8	698.4	682.7	666.5	656.7	650.8
107.5°	569.7	658.6	710.7	732.3	736.7	734.3	729.3	724.4
110°	518.6	612.0	681.2	723.0	745.1	754.4	757.8	757.8



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	478.4	565.8	636.0	687.1	722.0	739.7	749.5	753.9
115°	446.0	522.1	589.4	642.9	681.2	704.8	718.5	724.9
117.5°	423.4	490.6	549.6	600.2	639.0	663.5	677.3	681.2
120°	405.7	464.6	518.6	561.9	598.2	621.8	635.0	639.0
122.5°	392.4	446.0	492.6	532.4	563.8	584.9	598.2	601.6
125°	379.7	429.7	472.5	507.8	535.3	555.5	566.3	571.2
127.5°	366.4	414.0	454.3	487.7	512.7	530.9	541.2	543.2
130°	354.1	397.3	435.6	467.6	492.1	508.3	518.2	521.1
132.5°	341.8	381.6	415.5	446.0	470.5	486.7	495.6	499.0
135°	331.5	365.4	396.8	424.8	446.4	462.7	471.5	474.4
137.5°	322.2	350.7	377.7	402.2	421.9	437.1	445.5	448.9
140°	314.8	337.9	360.5	381.1	399.3	412.1	419.4	421.9
142.5°	308.4	327.1	345.8	363.0	377.7	388.0	394.9	396.8
145°	303.0	318.3	333.5	346.7	358.5	366.9	372.3	374.2
147.5°	297.6	310.4	322.7	333.0	342.8	349.7	353.1	354.1
150°	293.2	304.0	313.3	322.2	329.6	335.4	337.4	337.9
152.5°	288.3	297.6	306.0	312.4	318.3	322.7	324.6	325.1
155°	283.4	291.2	298.1	303.5	308.4	311.9	313.3	313.8
157.5°	278.5	285.4	290.8	295.2	299.1	302.1	303.5	303.5
160°	273.6	278.5	283.4	286.8	290.3	292.7	293.7	293.2
162.5°	268.2	272.6	276.5	279.5	281.9	283.9	283.9	283.9
165°	263.3	266.7	269.6	272.1	274.1	275.0	275.0	275.0
167.5°	258.3	260.8	263.3	265.2	266.2	267.2	266.7	266.7
170°	254.4	255.9	257.4	258.3	259.3	259.8	259.8	259.3
172.5°	250.0	251.5	252.4	252.9	252.9	253.9	252.9	252.4
175°	247.0	247.0	248.0	248.0	248.0	248.5	247.5	247.0
177.5°	244.6	245.1	245.1	245.1	244.6	245.1	243.6	243.6
180°	243.6	243.6	243.6	243.6	243.6	243.6	243.6	243.6

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