

Scaled data based on original data using
LM-79-2019 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions

Brand: NEO-RAY

Report Number: P1007737

Luminaire Tested: S124IP-B590UB50-4F0-XX-W2A-4

Issue Date: 5/5/2025

Test Information

Test Method: LM-79-2019
Report Number: P1007737
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-18)
Test Lab: INNOVATION CENTER
Issue Date: 5/5/2025
Manufacturer: COOPER LIGHTING SOLUTIONS
Product Line: NEO-RAY
Catalog Number: S124IP-B590UB50-4F0-XX-W2A-4
Description: Define 4 Indirect Pendant with 5000K BioUP LEDs {m-DER=1.015} {m-EER=1.115}
Light Source: -
Ballast/Driver: -

Summary

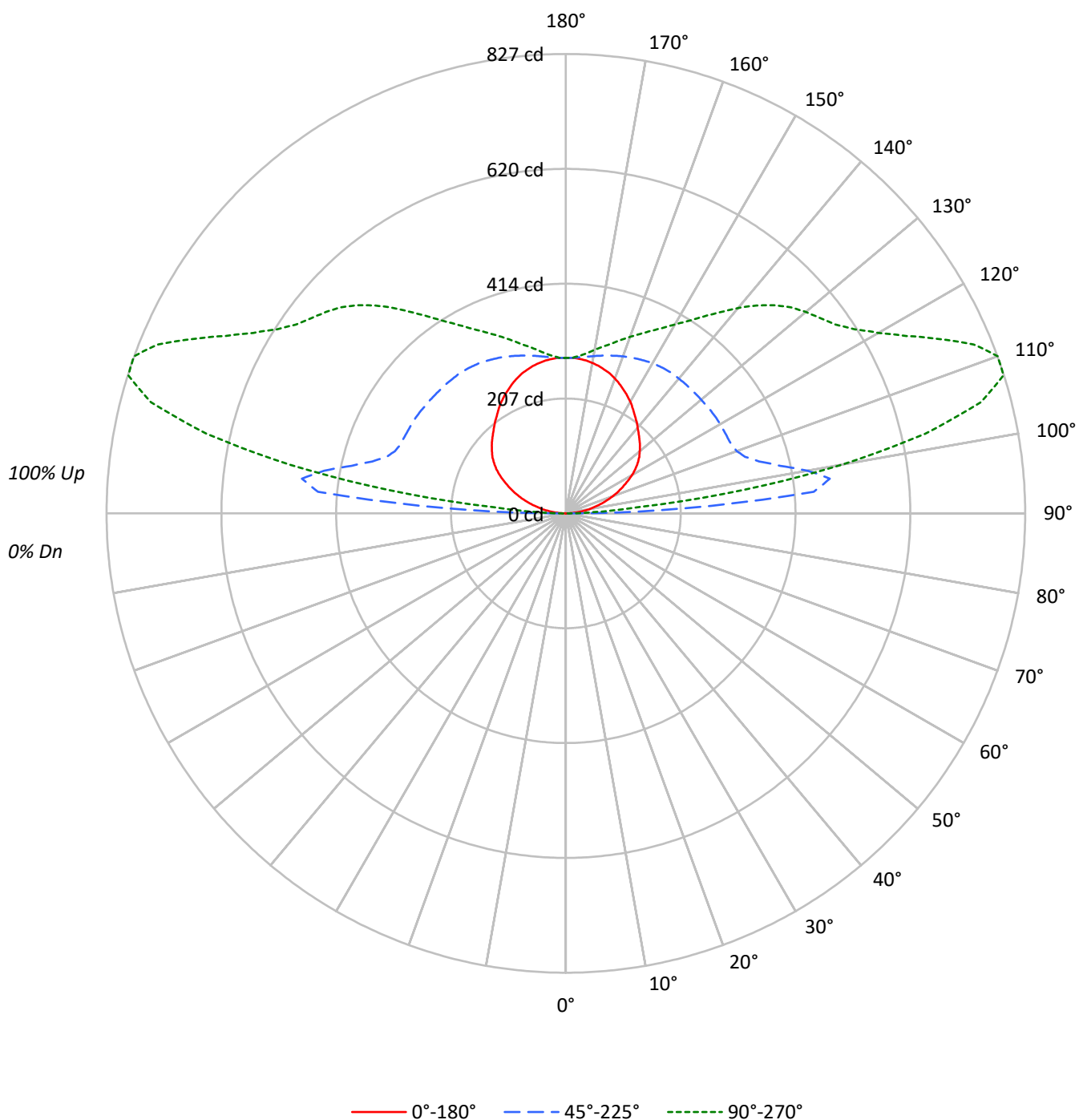
Lumens per Lamp: N/A
Luminaire Lumens: 2039.0 lumens
Efficiency: N/A
Efficacy: 132.4 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Indirect

Input Watts (W): 15.4
Input Voltage (V):
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: 24 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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	95	95	95	95	81	81	81	81	56	56	56	32	32	32	10	10	10
1	87	83	79	76	74	71	68	65	48	47	45	28	27	26	9	9	8
2	79	72	66	62	67	62	57	53	42	40	37	24	23	22	8	7	7
3	72	63	56	51	61	54	49	44	37	34	31	21	20	18	7	6	6
4	65	56	48	43	56	48	42	37	33	29	26	19	17	16	6	6	5
5	60	49	42	36	51	42	36	32	29	25	22	17	15	13	5	5	4
6	55	44	36	31	47	38	32	27	26	22	19	15	13	11	5	4	4
7	50	39	32	27	43	34	28	23	23	19	17	14	11	10	4	4	3
8	47	35	28	23	40	30	24	20	21	17	14	12	10	9	4	3	3
9	43	32	25	20	37	27	22	18	19	15	13	11	9	8	4	3	3
10	40	29	22	18	34	25	19	16	17	14	11	10	8	7	3	3	2

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

MAXIMUM LUMINANCE 45°-90°:

Horizontal Angle: 0°
Vertical Angle: 0°
Luminance: 0 cd/sqm

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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°	202.8	9.9
100°-110°	423.4	20.8
110°-120°	376.4	18.5
120°-130°	316.8	15.5
130°-140°	264.3	13.0
140°-150°	201.8	9.9
150°-160°	141.9	7.0
160°-170°	83.4	4.1
170°-180°	27.1	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°	1002.5	49.2
90°-150°	1785.4	87.6
90°-180°	2038.0	100.0
0°-180°	2039.0	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	10	11	12	1
95°	18	57	448	222	134	20
105°	64	93	361	776	774	69
115°	113	142	322	618	743	112
125°	158	187	320	526	593	141
135°	188	223	317	467	530	145
145°	216	247	316	394	433	136
155°	246	265	307	347	362	113
165°	268	276	294	311	316	76
175°	279	280	282	286	285	27
180°	280	280	280	280	280	

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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	1.6	3.3	3.8	4.4	4.4	7.7	7.7	8.8	9.9	9.3
92.5°	7.7	11.0	17.0	25.3	35.2	49.5	83.6	136.9	188.6	215.5	179.2
95°	18.1	19.8	25.3	32.4	45.6	68.7	116.5	206.7	338.1	448.0	460.7
97.5°	30.2	30.2	35.2	41.8	53.3	73.1	111.0	188.6	323.8	479.4	577.8
100°	41.8	41.8	45.6	52.2	62.7	80.3	112.7	174.8	287.0	442.0	582.7
102.5°	52.8	53.9	57.2	63.2	73.1	89.6	118.2	171.0	262.2	395.2	541.5
105°	64.3	66.0	68.7	75.3	85.2	101.1	127.5	173.2	250.1	360.6	489.8
107.5°	77.0	78.1	80.8	88.0	97.3	113.2	137.4	179.8	246.8	338.1	447.5
110°	89.6	90.7	93.5	100.0	109.9	124.8	149.0	187.5	247.9	327.6	417.2

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	101.7	102.8	106.1	112.1	122.0	136.9	160.0	195.7	251.2	322.7	400.2
115°	113.2	114.9	118.7	124.2	134.7	149.5	171.5	204.5	255.6	321.6	390.8
117.5°	125.3	127.0	130.3	136.3	146.2	161.6	182.5	213.3	260.0	321.0	385.9
120°	137.4	138.5	142.4	148.4	157.8	173.2	194.1	222.6	265.0	321.0	382.1
122.5°	148.4	149.5	153.4	158.9	169.3	184.2	205.0	231.4	269.9	320.5	377.7
125°	157.8	160.0	163.3	169.3	179.8	195.1	214.9	240.2	274.9	319.9	372.7
127.5°	166.6	168.2	172.1	178.7	189.7	205.0	224.3	247.9	278.7	318.8	366.1
130°	173.7	175.9	180.3	188.6	199.0	214.9	233.6	255.1	283.1	318.3	360.1
132.5°	180.9	182.5	188.6	196.2	207.8	222.6	241.3	262.2	287.0	317.7	354.6
135°	187.5	189.7	195.1	204.5	216.0	230.3	248.5	268.3	290.8	317.2	349.1
137.5°	194.1	196.2	202.3	211.1	223.2	236.9	254.0	272.7	293.0	317.2	344.1
140°	201.2	202.8	208.9	218.2	229.8	243.0	259.5	277.1	295.7	316.6	340.3
142.5°	208.9	210.5	216.0	224.8	235.8	248.5	264.4	280.4	297.9	316.6	337.0
145°	216.0	217.7	223.2	230.9	241.3	253.4	267.7	282.6	298.5	315.5	333.1
147.5°	224.3	224.8	229.8	238.0	246.8	257.8	271.6	284.8	299.0	313.9	329.8
150°	232.0	232.5	236.9	243.5	251.8	262.2	274.3	286.4	299.0	312.2	326.0
152.5°	239.1	239.1	243.5	249.6	256.7	266.1	276.5	287.5	297.9	309.5	321.6
155°	245.7	246.3	249.6	255.1	261.1	269.4	278.7	288.1	296.8	306.7	317.2
157.5°	252.3	252.3	255.6	260.0	265.5	272.1	280.4	288.1	295.7	304.0	312.8
160°	258.4	258.4	260.6	264.4	268.8	274.9	281.5	288.1	294.1	300.7	307.8
162.5°	263.9	263.3	265.0	268.3	272.1	276.5	282.6	288.1	292.4	297.4	303.4
165°	267.7	267.7	268.8	271.6	274.3	277.6	282.6	287.0	290.3	294.1	298.5
167.5°	272.1	271.6	272.1	274.3	276.0	278.7	282.6	285.9	288.1	290.8	294.1
170°	274.9	274.3	274.9	276.5	277.6	279.3	282.0	284.8	285.9	287.5	289.7
172.5°	277.6	277.1	277.1	278.2	278.7	279.8	281.5	283.7	283.7	284.2	285.9
175°	279.3	278.7	278.7	279.3	279.8	279.8	280.9	282.6	282.0	282.0	283.1
177.5°	280.4	279.8	279.3	279.8	279.8	279.8	280.4	281.5	280.4	280.4	280.9
180°	279.8	279.8	279.8	279.8	279.8	279.8	279.8	279.8	279.8	279.8	279.8

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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°	9.9	10.4	11.0	11.0	11.5	12.1	11.5	11.5
92.5°	132.5	98.9	78.1	64.3	56.1	52.2	50.0	50.0
95°	407.3	322.1	248.5	195.1	168.2	151.2	141.3	134.1
97.5°	586.5	544.2	483.8	422.2	384.8	351.8	335.3	322.1
100°	663.0	674.0	647.0	606.3	558.5	525.0	508.5	504.1
102.5°	659.1	724.5	741.0	730.0	705.3	683.3	665.7	662.4
105°	615.7	710.8	765.2	787.7	788.8	784.4	776.8	773.5
107.5°	562.4	665.2	741.0	787.2	811.4	821.3	825.7	826.2
110°	515.1	610.2	689.9	750.4	789.4	812.5	822.4	827.3

TEST NUMBER: P1007737

CATALOG NUMBER: S124IP-B590UB50-4F0-XX-W2A-4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	480.5	561.8	636.0	696.5	742.1	771.3	786.1	794.9
115°	459.6	527.2	591.5	644.3	687.7	720.7	738.3	742.7
117.5°	447.5	504.6	556.9	603.0	641.5	670.1	688.8	691.5
120°	439.8	490.9	534.9	573.9	605.2	629.4	643.7	649.8
122.5°	433.2	482.1	521.1	554.1	579.4	599.2	610.7	616.8
125°	425.5	472.8	510.7	540.9	562.9	578.9	589.3	592.6
127.5°	416.7	462.3	500.2	528.8	550.8	565.1	573.9	577.2
130°	405.7	449.1	486.5	515.6	538.2	551.9	560.7	564.0
132.5°	394.1	434.3	470.6	499.7	521.7	537.6	545.9	549.2
135°	383.7	419.4	453.0	480.5	502.4	517.8	526.6	529.9
137.5°	373.8	405.1	434.3	459.6	480.5	496.4	503.5	507.4
140°	365.6	391.4	416.1	439.2	458.5	470.6	478.3	482.7
142.5°	357.9	379.9	400.2	419.4	435.9	446.9	453.5	456.3
145°	350.7	369.4	385.9	401.3	415.0	424.4	429.9	432.6
147.5°	344.7	360.1	373.8	386.5	396.9	405.1	409.5	410.6
150°	339.2	351.8	362.8	372.7	381.5	388.7	391.9	392.5
152.5°	333.1	343.6	353.5	361.2	368.3	373.8	375.5	376.0
155°	327.1	335.9	344.1	350.7	356.2	360.6	362.3	362.3
157.5°	320.5	328.2	335.3	340.8	345.2	348.5	349.6	349.6
160°	314.4	320.5	326.5	330.9	334.2	337.5	338.1	338.1
162.5°	308.4	313.3	317.7	321.6	323.8	327.1	327.6	327.1
165°	302.9	306.2	310.0	312.8	315.0	317.2	316.6	316.1
167.5°	297.4	300.1	303.4	305.1	306.2	307.8	307.8	307.3
170°	292.4	294.1	296.3	297.9	299.0	299.6	299.0	299.0
172.5°	288.1	289.2	290.3	291.4	291.9	292.4	291.9	290.8
175°	284.2	284.8	285.9	285.9	285.9	287.0	285.9	284.8
177.5°	281.5	282.0	282.0	282.6	282.0	282.6	281.5	280.4
180°	279.8	279.8	279.8	279.8	279.8	279.8	279.8	279.8

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