

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: P1007728

Luminaire Tested: S124IP-B590UB30-4F0-XX-W2A-4

Issue Date: 5/5/2025

Test Information

Test Method: LM-79-2019
Report Number: P1007728
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-B590UB30-4F0-XX-W2A-4
Description: Define 4 Indirect Pendant with 3000K BioUP LEDs {m-DER=0.589} {m-EER=0.647}
Light Source: -
Ballast/Driver: -

Summary

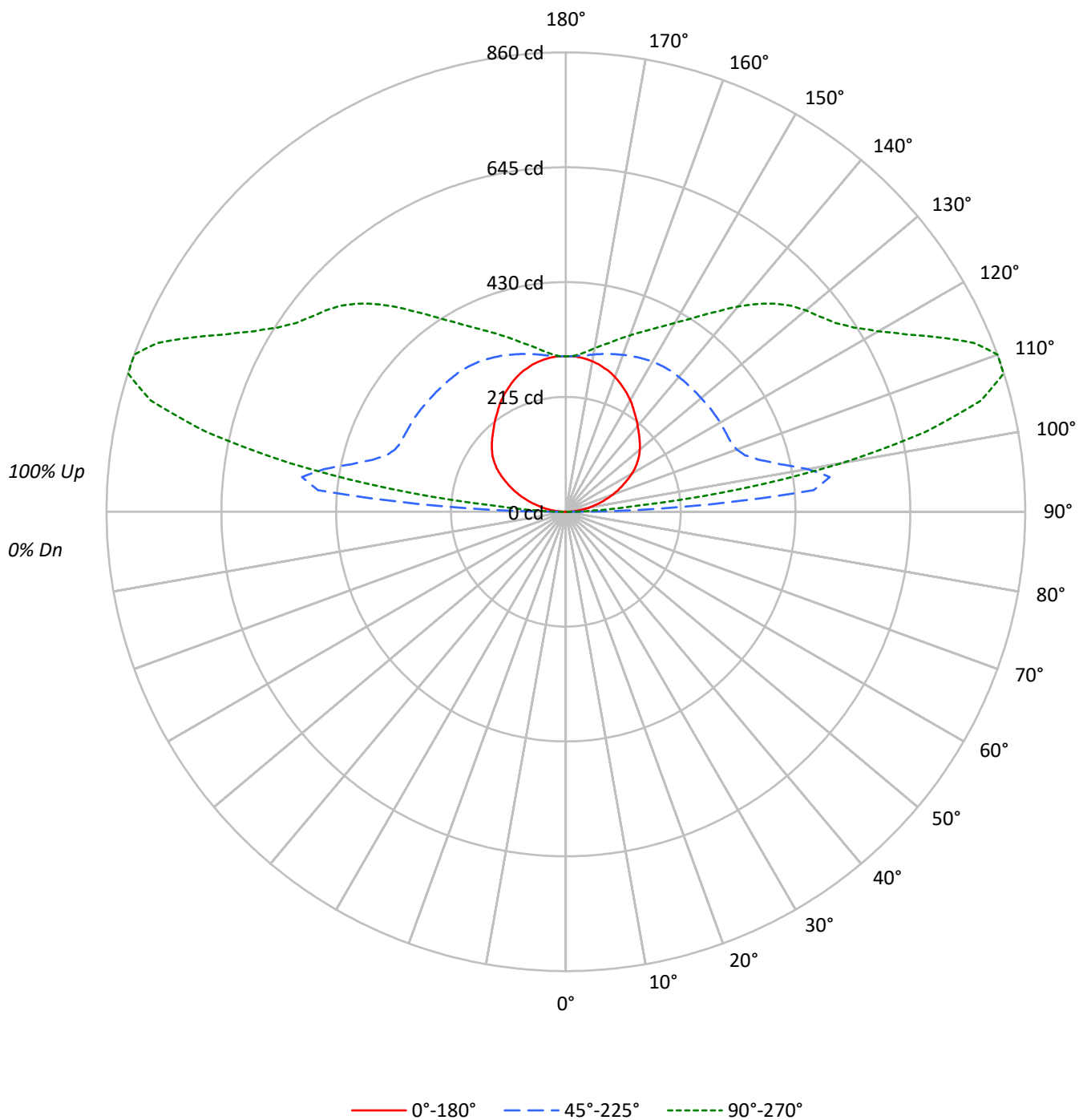
Lumens per Lamp: N/A
Luminaire Lumens: 2120.0 lumens
Efficiency: N/A
Efficacy: 137.7 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Indirect

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°	210.8	9.9
100°-110°	440.2	20.8
110°-120°	391.3	18.5
120°-130°	329.4	15.5
130°-140°	274.8	13.0
140°-150°	209.8	9.9
150°-160°	147.5	7.0
160°-170°	86.8	4.1
170°-180°	28.2	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°	1042.3	49.2
90°-150°	1856.4	87.6
90°-180°	2119.0	100.0
0°-180°	2120.0	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°	1	5	10	11	12	1
95°	19	59	466	231	140	21
105°	67	97	375	807	804	71
115°	118	148	334	642	772	117
125°	164	195	333	547	616	146
135°	195	232	330	485	551	151
145°	225	257	328	409	450	141
155°	256	276	319	361	377	118
165°	278	287	306	324	329	79
175°	290	291	293	297	296	28
180°	291	291	291	291	291	

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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	1.7	3.4	4.0	4.6	4.6	8.0	8.0	9.1	10.3	9.7
92.5°	8.0	11.4	17.7	26.3	36.6	51.4	86.9	142.3	196.0	224.0	186.3
95°	18.9	20.6	26.3	33.7	47.4	71.4	121.2	214.9	351.5	465.8	479.0
97.5°	31.4	31.4	36.6	43.4	55.4	76.0	115.5	196.0	336.6	498.4	600.7
100°	43.4	43.4	47.4	54.3	65.2	83.4	117.2	181.8	298.4	459.5	605.8
102.5°	54.9	56.0	59.4	65.7	76.0	93.2	122.9	177.8	272.6	410.9	563.0
105°	66.9	68.6	71.4	78.3	88.6	105.2	132.6	180.0	260.1	374.9	509.3
107.5°	80.0	81.2	84.0	91.4	101.2	117.7	142.9	186.9	256.6	351.5	465.2
110°	93.2	94.3	97.2	104.0	114.3	129.7	154.9	194.9	257.8	340.6	433.8

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	105.7	106.9	110.3	116.6	126.9	142.3	166.3	203.5	261.2	335.5	416.1
115°	117.7	119.5	123.5	129.2	140.0	155.5	178.3	212.6	265.8	334.4	406.4
117.5°	130.3	132.0	135.5	141.7	152.0	168.0	189.8	221.8	270.3	333.8	401.2
120°	142.9	144.0	148.0	154.3	164.0	180.0	201.8	231.5	275.5	333.8	397.2
122.5°	154.3	155.5	159.5	165.2	176.0	191.5	213.2	240.6	280.6	333.2	392.7
125°	164.0	166.3	169.8	176.0	186.9	202.9	223.5	249.8	285.8	332.6	387.5
127.5°	173.2	174.9	178.9	185.8	197.2	213.2	233.2	257.8	289.8	331.5	380.7
130°	180.6	182.9	187.5	196.0	206.9	223.5	242.9	265.2	294.4	330.9	374.4
132.5°	188.0	189.8	196.0	204.0	216.0	231.5	250.9	272.6	298.4	330.4	368.7
135°	194.9	197.2	202.9	212.6	224.6	239.5	258.3	278.9	302.4	329.8	362.9
137.5°	201.8	204.0	210.3	219.5	232.1	246.3	264.1	283.5	304.6	329.8	357.8
140°	209.2	210.9	217.2	226.9	238.9	252.6	269.8	288.1	307.5	329.2	353.8
142.5°	217.2	218.9	224.6	233.8	245.2	258.3	274.9	291.5	309.8	329.2	350.4
145°	224.6	226.3	232.1	240.1	250.9	263.5	278.3	293.8	310.4	328.1	346.4
147.5°	233.2	233.8	238.9	247.5	256.6	268.1	282.3	296.1	310.9	326.4	342.9
150°	241.2	241.8	246.3	253.2	261.8	272.6	285.2	297.8	310.9	324.6	338.9
152.5°	248.6	248.6	253.2	259.5	266.9	276.6	287.5	298.9	309.8	321.8	334.4
155°	255.5	256.1	259.5	265.2	271.5	280.1	289.8	299.5	308.6	318.9	329.8
157.5°	262.3	262.3	265.8	270.3	276.1	282.9	291.5	299.5	307.5	316.1	325.2
160°	268.6	268.6	270.9	274.9	279.5	285.8	292.6	299.5	305.8	312.6	320.1
162.5°	274.3	273.8	275.5	278.9	282.9	287.5	293.8	299.5	304.1	309.2	315.5
165°	278.3	278.3	279.5	282.3	285.2	288.6	293.8	298.4	301.8	305.8	310.4
167.5°	282.9	282.3	282.9	285.2	286.9	289.8	293.8	297.2	299.5	302.4	305.8
170°	285.8	285.2	285.8	287.5	288.6	290.4	293.2	296.1	297.2	298.9	301.2
172.5°	288.6	288.1	288.1	289.2	289.8	290.9	292.6	294.9	294.9	295.5	297.2
175°	290.4	289.8	289.8	290.4	290.9	290.9	292.1	293.8	293.2	293.2	294.4
177.5°	291.5	290.9	290.4	290.9	290.9	290.9	291.5	292.6	291.5	291.5	292.1
180°	290.9	290.9	290.9	290.9	290.9	290.9	290.9	290.9	290.9	290.9	290.9

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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°	10.3	10.9	11.4	11.4	12.0	12.6	12.0	12.0
92.5°	137.7	102.9	81.2	66.9	58.3	54.3	52.0	52.0
95°	423.5	334.9	258.3	202.9	174.9	157.2	146.9	139.5
97.5°	609.8	565.8	503.0	439.0	400.1	365.8	348.6	334.9
100°	689.3	700.7	672.7	630.4	580.7	545.8	528.7	524.1
102.5°	685.3	753.3	770.5	759.0	733.3	710.4	692.2	688.7
105°	640.1	739.0	795.6	819.0	820.2	815.6	807.6	804.2
107.5°	584.7	691.6	770.5	818.5	843.6	853.9	858.5	859.0
110°	535.5	634.4	717.3	780.2	820.8	844.8	855.0	860.2

TEST NUMBER: P1007728

CATALOG NUMBER: S124IP-B590UB30-4F0-XX-W2A-4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	499.5	584.1	661.3	724.2	771.6	801.9	817.3	826.5
115°	477.8	548.1	615.0	669.9	715.0	749.3	767.6	772.2
117.5°	465.2	524.7	579.0	627.0	667.0	696.7	716.2	719.0
120°	457.2	510.4	556.1	596.7	629.3	654.4	669.3	675.6
122.5°	450.4	501.3	541.8	576.1	602.4	623.0	635.0	641.3
125°	442.4	491.5	531.0	562.4	585.3	601.8	612.7	616.1
127.5°	433.2	480.7	520.1	549.8	572.7	587.6	596.7	600.1
130°	421.8	467.0	505.8	536.1	559.6	573.8	583.0	586.4
132.5°	409.8	451.5	489.3	519.5	542.4	559.0	567.6	571.0
135°	398.9	436.1	471.0	499.5	522.4	538.4	547.5	551.0
137.5°	388.7	421.2	451.5	477.8	499.5	516.1	523.5	527.5
140°	380.1	406.9	432.7	456.7	476.7	489.3	497.3	501.8
142.5°	372.1	394.9	416.1	436.1	453.2	464.7	471.5	474.4
145°	364.7	384.1	401.2	417.2	431.5	441.2	447.0	449.8
147.5°	358.4	374.4	388.7	401.8	412.7	421.2	425.8	427.0
150°	352.6	365.8	377.2	387.5	396.7	404.1	407.5	408.1
152.5°	346.4	357.2	367.5	375.5	382.9	388.7	390.4	390.9
155°	340.1	349.2	357.8	364.7	370.4	374.9	376.7	376.7
157.5°	333.2	341.2	348.6	354.4	358.9	362.4	363.5	363.5
160°	326.9	333.2	339.5	344.1	347.5	350.9	351.5	351.5
162.5°	320.6	325.8	330.4	334.4	336.6	340.1	340.6	340.1
165°	314.9	318.4	322.4	325.2	327.5	329.8	329.2	328.6
167.5°	309.2	312.1	315.5	317.2	318.4	320.1	320.1	319.5
170°	304.1	305.8	308.1	309.8	310.9	311.5	310.9	310.9
172.5°	299.5	300.6	301.8	302.9	303.5	304.1	303.5	302.4
175°	295.5	296.1	297.2	297.2	297.2	298.4	297.2	296.1
177.5°	292.6	293.2	293.2	293.8	293.2	293.8	292.6	291.5
180°	290.9	290.9	290.9	290.9	290.9	290.9	290.9	290.9

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