

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: P1007761

Luminaire Tested: S124IP-B810UB35-4F0-XX-W2A-4

Issue Date: 5/5/2025

Test Information

Test Method: LM-79-2019
Report Number: P1007761
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-B810UB35-4F0-XX-W2A-4
Description: Define 4 Indirect Pendant with 3500K BioUP LEDs {m-DER=0.721} {m-EER=0.792}
Light Source: -
Ballast/Driver: -

Summary

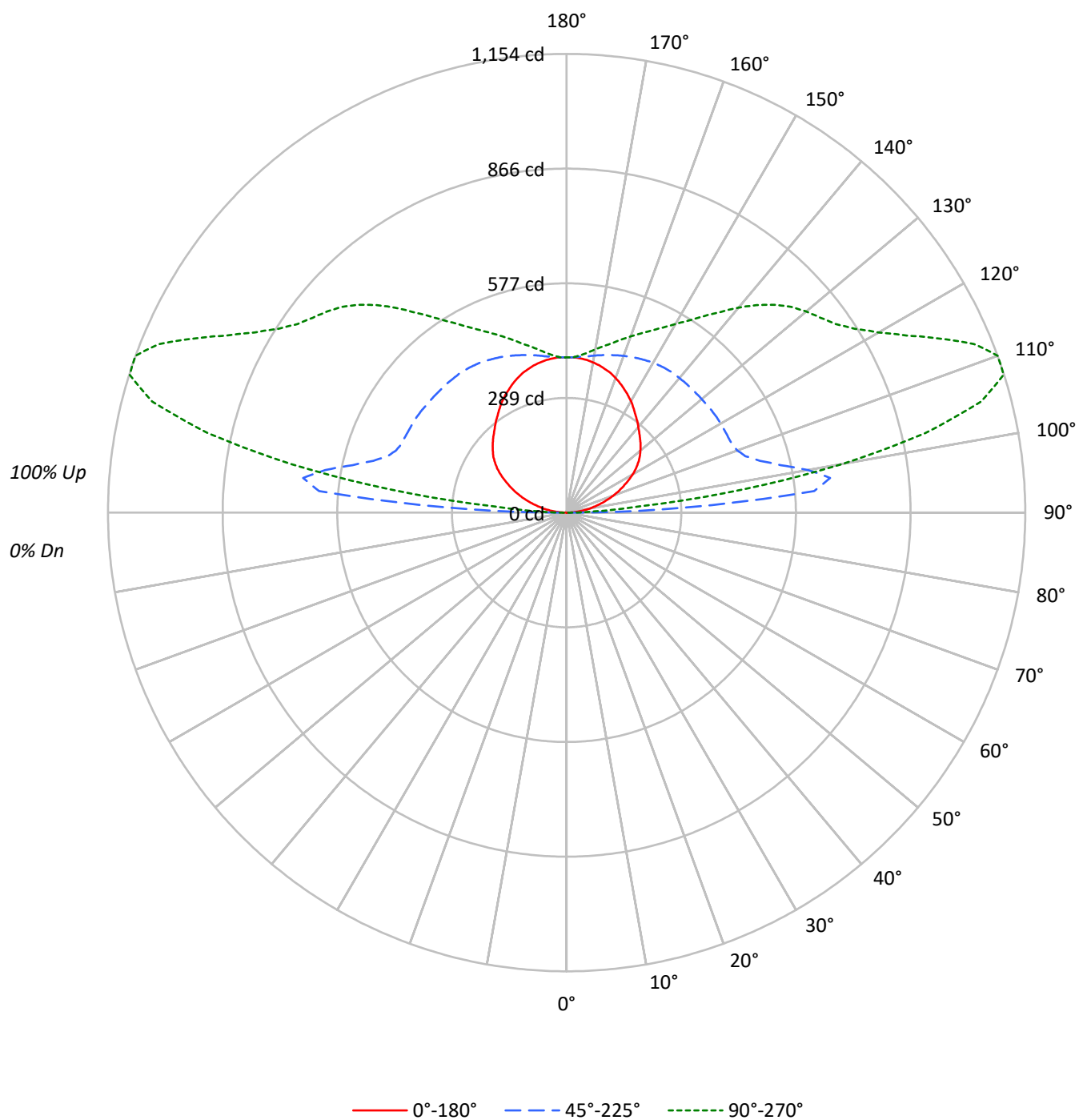
Lumens per Lamp: N/A
Luminaire Lumens: 2845.0 lumens
Efficiency: N/A
Efficacy: 134.8 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.33' x L: 4' x H: 0')
CIE Type: Indirect

Input Watts (W): 21.1
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°	1.5	0.1
90°-100°	283.0	9.9
100°-110°	590.7	20.8
110°-120°	525.1	18.5
120°-130°	442.0	15.5
130°-140°	368.8	13.0
140°-150°	281.6	9.9
150°-160°	198.0	7.0
160°-170°	116.4	4.1
170°-180°	37.9	1.3
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	1.5	0.1
90°-120°	1398.8	49.2
90°-150°	2491.2	87.6
90°-180°	2843.0	99.9
0°-180°	2845.0	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	6	14	15	16	2
95°	25	80	625	310	187	28
105°	90	130	503	1083	1079	96
115°	158	198	449	862	1036	157
125°	220	262	446	734	827	196
135°	262	311	443	651	739	202
145°	301	345	440	549	604	189
155°	343	370	428	485	506	158
165°	374	385	410	434	441	106
175°	390	390	394	399	397	37
180°	390	390	390	390	390	

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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°	0.8	2.3	4.6	5.4	6.1	6.1	10.7	10.7	12.3	13.8	13.0
92.5°	10.7	15.3	23.8	35.3	49.1	69.0	116.6	191.0	263.1	300.7	250.0
95°	25.3	27.6	35.3	45.3	63.7	95.9	162.6	288.4	471.7	625.1	642.8
97.5°	42.2	42.2	49.1	58.3	74.4	102.0	154.9	263.1	451.8	668.8	806.1
100°	58.3	58.3	63.7	72.9	87.4	112.0	157.2	243.9	400.4	616.7	813.0
102.5°	73.6	75.2	79.8	88.2	102.0	125.0	164.9	238.5	365.9	551.5	755.5
105°	89.7	92.0	95.9	105.1	118.9	141.1	177.9	241.6	349.0	503.2	683.4
107.5°	107.4	108.9	112.8	122.7	135.8	158.0	191.8	250.8	344.4	471.7	624.4
110°	125.0	126.6	130.4	139.6	153.4	174.1	207.9	261.6	345.9	457.1	582.2

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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	141.9	143.4	148.0	156.5	170.3	191.0	223.2	273.1	350.5	450.2	558.4
115°	158.0	160.3	165.7	173.3	187.9	208.6	239.3	285.3	356.7	448.7	545.3
117.5°	174.9	177.2	181.8	190.2	204.0	225.5	254.6	297.6	362.8	447.9	538.4
120°	191.8	193.3	198.7	207.1	220.1	241.6	270.8	310.6	369.7	447.9	533.1
122.5°	207.1	208.6	214.0	221.7	236.2	257.0	286.1	322.9	376.6	447.2	526.9
125°	220.1	223.2	227.8	236.2	250.8	272.3	299.9	335.2	383.5	446.4	520.0
127.5°	232.4	234.7	240.1	249.3	264.6	286.1	312.9	345.9	388.9	444.9	510.8
130°	242.4	245.4	251.6	263.1	277.7	299.9	326.0	355.9	395.0	444.1	502.4
132.5°	252.3	254.6	263.1	273.8	289.9	310.6	336.7	365.9	400.4	443.3	494.7
135°	261.6	264.6	272.3	285.3	301.4	321.4	346.7	374.3	405.8	442.6	487.1
137.5°	270.8	273.8	282.3	294.5	311.4	330.6	354.4	380.4	408.8	442.6	480.2
140°	280.7	283.0	291.5	304.5	320.6	339.0	362.0	386.6	412.7	441.8	474.8
142.5°	291.5	293.8	301.4	313.7	329.0	346.7	368.9	391.2	415.7	441.8	470.2
145°	301.4	303.7	311.4	322.1	336.7	353.6	373.5	394.2	416.5	440.3	464.8
147.5°	312.9	313.7	320.6	332.1	344.4	359.7	378.9	397.3	417.3	438.0	460.2
150°	323.7	324.4	330.6	339.8	351.3	365.9	382.7	399.6	417.3	435.7	454.8
152.5°	333.7	333.7	339.8	348.2	358.2	371.2	385.8	401.1	415.7	431.8	448.7
155°	342.9	343.6	348.2	355.9	364.3	375.8	388.9	401.9	414.2	428.0	442.6
157.5°	352.1	352.1	356.7	362.8	370.5	379.7	391.2	401.9	412.7	424.2	436.4
160°	360.5	360.5	363.6	368.9	375.1	383.5	392.7	401.9	410.4	419.6	429.5
162.5°	368.2	367.4	369.7	374.3	379.7	385.8	394.2	401.9	408.1	415.0	423.4
165°	373.5	373.5	375.1	378.9	382.7	387.3	394.2	400.4	405.0	410.4	416.5
167.5°	379.7	378.9	379.7	382.7	385.0	388.9	394.2	398.8	401.9	405.8	410.4
170°	383.5	382.7	383.5	385.8	387.3	389.6	393.5	397.3	398.8	401.1	404.2
172.5°	387.3	386.6	386.6	388.1	388.9	390.4	392.7	395.8	395.8	396.5	398.8
175°	389.6	388.9	388.9	389.6	390.4	390.4	391.9	394.2	393.5	393.5	395.0
177.5°	391.2	390.4	389.6	390.4	390.4	390.4	391.2	392.7	391.2	391.2	391.9
180°	390.4	390.4	390.4	390.4	390.4	390.4	390.4	390.4	390.4	390.4	390.4

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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°	13.8	14.6	15.3	15.3	16.1	16.9	16.1	16.1
92.5°	184.9	138.1	108.9	89.7	78.2	72.9	69.8	69.8
95°	568.4	449.5	346.7	272.3	234.7	210.9	197.1	187.2
97.5°	818.4	759.3	675.0	589.1	536.9	490.9	467.9	449.5
100°	925.0	940.4	902.8	846.0	779.3	732.5	709.5	703.4
102.5°	919.7	1010.9	1033.9	1018.6	984.1	953.4	928.9	924.3
105°	859.1	991.8	1067.7	1099.1	1100.7	1094.5	1083.8	1079.2
107.5°	784.7	928.1	1033.9	1098.4	1132.1	1145.9	1152.1	1152.8
110°	718.7	851.4	962.6	1047.0	1101.4	1133.6	1147.5	1154.4

TEST NUMBER: P1007761

CATALOG NUMBER: S124IP-B810UB35-4F0-XX-W2A-4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	670.4	783.9	887.4	971.8	1035.5	1076.1	1096.8	1109.1
115°	641.2	735.6	825.3	898.9	959.5	1005.6	1030.1	1036.2
117.5°	624.4	704.1	777.0	841.4	895.1	935.0	961.1	964.9
120°	613.6	684.9	746.3	800.8	844.5	878.2	898.2	906.6
122.5°	604.4	672.7	727.1	773.2	808.4	836.0	852.2	860.6
125°	593.7	659.6	712.6	754.7	785.4	807.7	822.2	826.8
127.5°	581.4	645.1	698.0	737.9	768.6	788.5	800.8	805.4
130°	566.1	626.7	678.8	719.5	750.9	770.1	782.4	787.0
132.5°	550.0	605.9	656.6	697.2	727.9	750.1	761.6	766.2
135°	535.4	585.2	632.0	670.4	701.1	722.5	734.8	739.4
137.5°	521.6	565.3	605.9	641.2	670.4	692.6	702.6	708.0
140°	510.1	546.1	580.6	612.8	639.7	656.6	667.3	673.4
142.5°	499.3	530.0	558.4	585.2	608.2	623.6	632.8	636.6
145°	489.4	515.4	538.4	559.9	579.1	592.1	599.8	603.6
147.5°	480.9	502.4	521.6	539.2	553.8	565.3	571.4	573.0
150°	473.2	490.9	506.2	520.0	532.3	542.3	546.9	547.6
152.5°	464.8	479.4	493.2	503.9	513.9	521.6	523.9	524.6
155°	456.4	468.6	480.2	489.4	497.0	503.2	505.5	505.5
157.5°	447.2	457.9	467.9	475.6	481.7	486.3	487.8	487.8
160°	438.7	447.2	455.6	461.7	466.3	470.9	471.7	471.7
162.5°	430.3	437.2	443.3	448.7	451.8	456.4	457.1	456.4
165°	422.6	427.2	432.6	436.4	439.5	442.6	441.8	441.0
167.5°	415.0	418.8	423.4	425.7	427.2	429.5	429.5	428.8
170°	408.1	410.4	413.4	415.7	417.3	418.0	417.3	417.3
172.5°	401.9	403.5	405.0	406.5	407.3	408.1	407.3	405.8
175°	396.5	397.3	398.8	398.8	398.8	400.4	398.8	397.3
177.5°	392.7	393.5	393.5	394.2	393.5	394.2	392.7	391.2
180°	390.4	390.4	390.4	390.4	390.4	390.4	390.4	390.4

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