

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: P334442

Luminaire Tested: **S122IP-S725U830-4F0-1E-UDD-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334442
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-S725U830-4F0-1E-UDD-4
Description: DEFINE 2 INDIRECT LED LUMINAIRE, BATWING OPTIC
PENDANT MOUNT, 725 LUMENS PER FOOT
Light Source: 3000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2670.6 lumens
Efficiency: N/A
Efficacy: 101.2 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Indirect

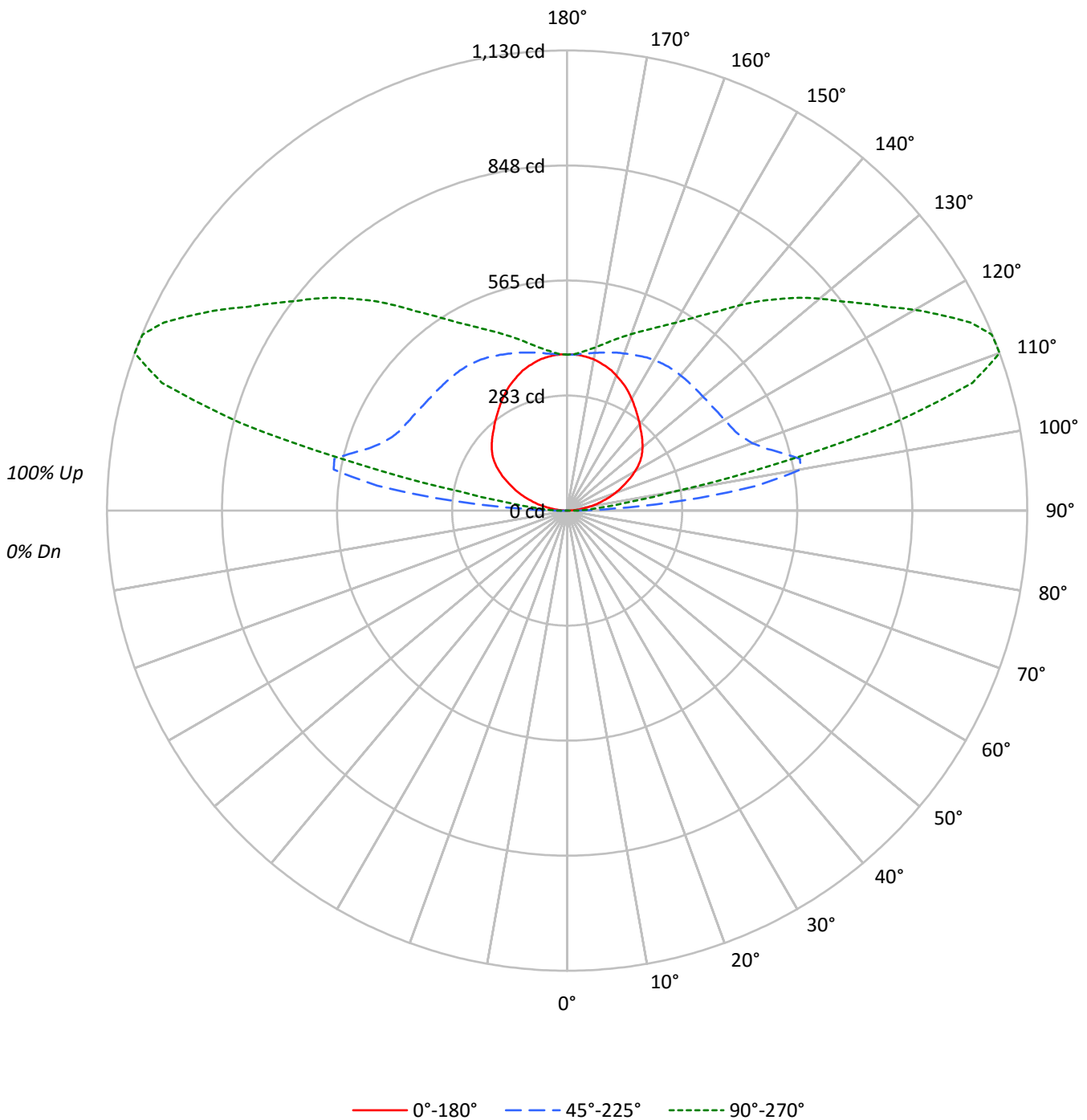
Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2.5	0.1
90°-100°	149.3	5.6
100°-110°	526.0	19.7
110°-120°	552.4	20.7
120°-130°	454.4	17.0
130°-140°	365.1	13.7
140°-150°	275.8	10.3
150°-160°	193.9	7.3
160°-170°	114.1	4.3
170°-180°	37.1	1.4
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	2.5	0.1
90°-120°	1227.7	46.0
90°-150°	2323.0	87.0
90°-180°	2668.0	99.9
0°-180°	2670.6	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	10	25	24	24	2
95°	26	63	289	109	84	27
105°	90	136	546	976	830	96
115°	158	200	457	943	1093	157
125°	221	262	439	764	886	196
135°	259	309	434	642	735	200
145°	296	340	432	536	586	186
155°	337	364	419	474	493	155
165°	367	378	402	426	432	103
175°	382	383	386	391	390	36
180°	383	383	383	383	383	



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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°	0.7	2.9	5.9	7.4	8.8	11.1	14.7	19.9	24.3	25.1	24.3
92.5°	11.1	15.5	21.4	25.1	30.9	39.0	58.9	86.9	112.0	113.5	95.0
95°	25.8	28.7	36.1	42.7	54.5	72.2	106.1	170.2	255.7	288.8	252.7
97.5°	38.3	42.7	50.8	60.4	73.7	93.6	137.0	226.2	364.0	470.8	474.5
100°	56.7	58.9	65.6	77.4	92.1	112.7	151.8	241.7	400.8	582.1	688.2
102.5°	73.7	75.2	81.8	93.6	109.0	129.7	165.0	242.4	386.8	585.7	767.7
105°	89.9	92.8	98.0	109.0	125.3	145.9	180.5	246.1	367.7	546.0	741.9
107.5°	107.6	109.8	114.9	125.3	141.5	162.1	196.0	254.2	357.3	509.1	687.4
110°	125.3	128.2	132.6	142.2	157.7	179.0	211.5	264.5	354.4	484.1	636.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	141.5	144.4	149.6	158.4	173.1	195.2	226.2	275.6	355.1	467.9	601.2
115°	158.4	162.1	166.5	175.4	190.1	210.0	241.7	286.6	358.1	456.8	573.2
117.5°	176.1	179.0	183.5	191.6	205.6	226.2	255.7	298.4	362.5	450.9	554.1
120°	192.3	195.2	199.7	206.3	221.0	241.7	270.4	310.2	366.9	445.8	539.3
122.5°	207.8	210.0	214.4	221.8	236.5	257.9	284.4	320.5	372.1	442.8	526.8
125°	221.0	223.2	227.7	236.5	251.2	271.9	298.4	331.6	377.2	439.1	515.0
127.5°	232.1	235.0	240.9	250.5	264.5	285.9	311.7	341.9	382.4	436.9	504.0
130°	241.7	244.6	252.0	262.3	277.0	297.7	323.4	351.4	388.3	435.4	492.9
132.5°	250.5	254.2	262.3	273.3	288.8	309.5	333.8	361.0	394.2	434.7	484.1
135°	259.3	262.3	271.1	282.2	299.1	319.8	343.3	369.1	398.6	434.0	476.0
137.5°	267.5	271.1	280.0	291.8	308.7	327.9	351.4	375.8	403.0	434.0	470.1
140°	277.0	280.0	288.8	300.6	316.8	336.0	358.1	380.9	406.0	433.2	464.9
142.5°	286.6	288.8	296.9	308.7	324.2	341.9	363.2	385.3	408.2	433.2	459.8
145°	296.2	299.1	306.5	317.6	332.3	348.5	368.4	389.0	409.7	431.8	455.3
147.5°	306.5	308.7	316.1	326.4	338.9	353.7	372.8	391.2	410.4	429.5	450.9
150°	316.8	319.0	324.9	334.5	345.6	358.8	375.8	392.7	409.7	427.3	445.0
152.5°	327.1	327.9	333.8	341.9	352.2	364.0	378.7	393.4	408.2	423.7	439.9
155°	336.7	337.4	341.9	350.0	358.1	369.1	381.7	394.2	406.7	419.2	433.2
157.5°	344.8	345.6	349.2	356.6	363.2	372.8	383.9	394.2	403.8	414.8	427.3
160°	352.9	353.7	356.6	362.5	368.4	376.5	385.3	394.2	401.5	410.4	420.7
162.5°	361.0	360.3	363.2	367.7	372.8	378.7	386.1	393.4	399.3	406.7	414.8
165°	366.9	366.2	367.7	372.1	375.8	380.2	386.8	392.0	396.4	401.5	408.2
167.5°	372.1	371.3	372.8	375.8	378.7	381.7	386.8	391.2	393.4	397.1	401.5
170°	377.2	375.8	376.5	378.7	380.2	382.4	386.1	389.8	391.2	393.4	396.4
172.5°	380.2	379.4	378.7	380.9	381.7	383.1	385.3	387.5	388.3	389.0	391.2
175°	382.4	381.7	380.9	382.4	382.4	383.1	384.6	386.1	385.3	386.1	386.8
177.5°	383.9	382.4	381.7	383.1	383.1	383.1	383.9	385.3	383.9	383.1	383.9
180°	383.1	383.1	383.1	383.1	383.1	383.1	383.1	383.1	383.1	383.1	383.1



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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°	23.6	22.1	23.6	24.3	24.3	24.3	24.3	24.3
92.5°	74.4	63.4	55.3	49.4	48.6	45.7	46.4	44.9
95°	193.0	148.1	117.1	100.9	91.4	85.5	83.3	84.0
97.5°	394.9	315.3	240.9	196.7	168.0	153.3	145.1	140.7
100°	672.7	581.3	480.4	391.2	330.1	298.4	277.0	263.8
102.5°	854.7	851.7	784.7	688.9	621.1	561.4	533.4	514.3
105°	895.2	978.5	988.0	963.7	918.0	872.4	840.7	830.4
107.5°	851.7	975.5	1047.7	1077.2	1076.4	1069.8	1060.2	1043.3
110°	792.0	923.9	1018.2	1078.7	1110.3	1124.3	1131.0	1130.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	737.5	862.8	965.2	1036.7	1083.8	1109.6	1123.6	1128.8
115°	694.8	808.3	904.8	980.7	1033.0	1066.9	1086.0	1092.7
117.5°	659.4	761.1	851.0	923.2	977.0	1013.1	1033.0	1038.1
120°	634.4	725.7	803.8	870.9	922.5	957.1	978.5	985.8
122.5°	614.5	696.3	769.2	828.1	873.1	907.0	925.4	931.3
125°	595.3	671.2	736.1	791.3	834.0	862.0	880.5	886.4
127.5°	576.2	646.2	708.1	759.6	797.2	823.7	839.9	844.4
130°	557.7	621.1	679.3	727.9	764.0	789.1	803.8	809.7
132.5°	540.1	597.5	649.8	694.8	730.2	755.2	768.5	773.6
135°	523.9	572.5	621.1	662.4	694.1	718.4	731.6	734.6
137.5°	510.6	552.6	592.4	629.2	659.4	680.8	692.6	697.0
140°	498.1	533.4	567.3	599.7	623.3	642.5	653.5	658.0
142.5°	487.8	516.5	544.5	570.3	592.4	609.3	618.9	618.9
145°	478.2	502.5	525.3	546.7	564.4	576.9	584.3	586.5
147.5°	470.8	490.7	509.1	525.3	540.8	551.1	556.3	557.7
150°	462.7	478.9	494.4	507.6	518.7	527.5	532.0	532.7
152.5°	454.6	469.3	481.9	492.9	501.0	508.4	511.3	511.3
155°	447.2	459.0	470.1	478.2	486.3	491.4	494.4	492.9
157.5°	438.4	448.7	458.3	464.9	470.8	475.2	476.7	476.7
160°	430.3	438.4	446.5	451.7	456.8	460.5	461.2	461.2
162.5°	422.2	428.8	435.4	439.1	444.3	446.5	447.2	446.5
165°	414.1	419.2	424.4	427.3	430.3	433.2	433.2	432.5
167.5°	406.0	410.4	414.1	417.0	418.5	420.0	420.0	419.2
170°	400.1	402.3	405.2	406.7	407.4	409.7	408.9	407.4
172.5°	393.4	394.9	397.1	397.9	398.6	399.3	398.6	397.9
175°	389.0	389.8	390.5	391.2	391.2	392.0	391.2	389.8
177.5°	385.3	385.3	386.1	386.1	386.1	386.1	385.3	383.9
180°	383.1	383.1	383.1	383.1	383.1	383.1	383.1	383.1

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