

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: P334447

Luminaire Tested: **S122IP-S725U835-4F0-1E-UDD-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334447
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-S725U835-4F0-1E-UDD-4
Description: DEFINE 2 INDIRECT LED LUMINAIRE, BATWING OPTIC
PENDANT MOUNT, 725 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 2833.4 lumens
Efficiency: N/A
Efficacy: 107.3 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Indirect

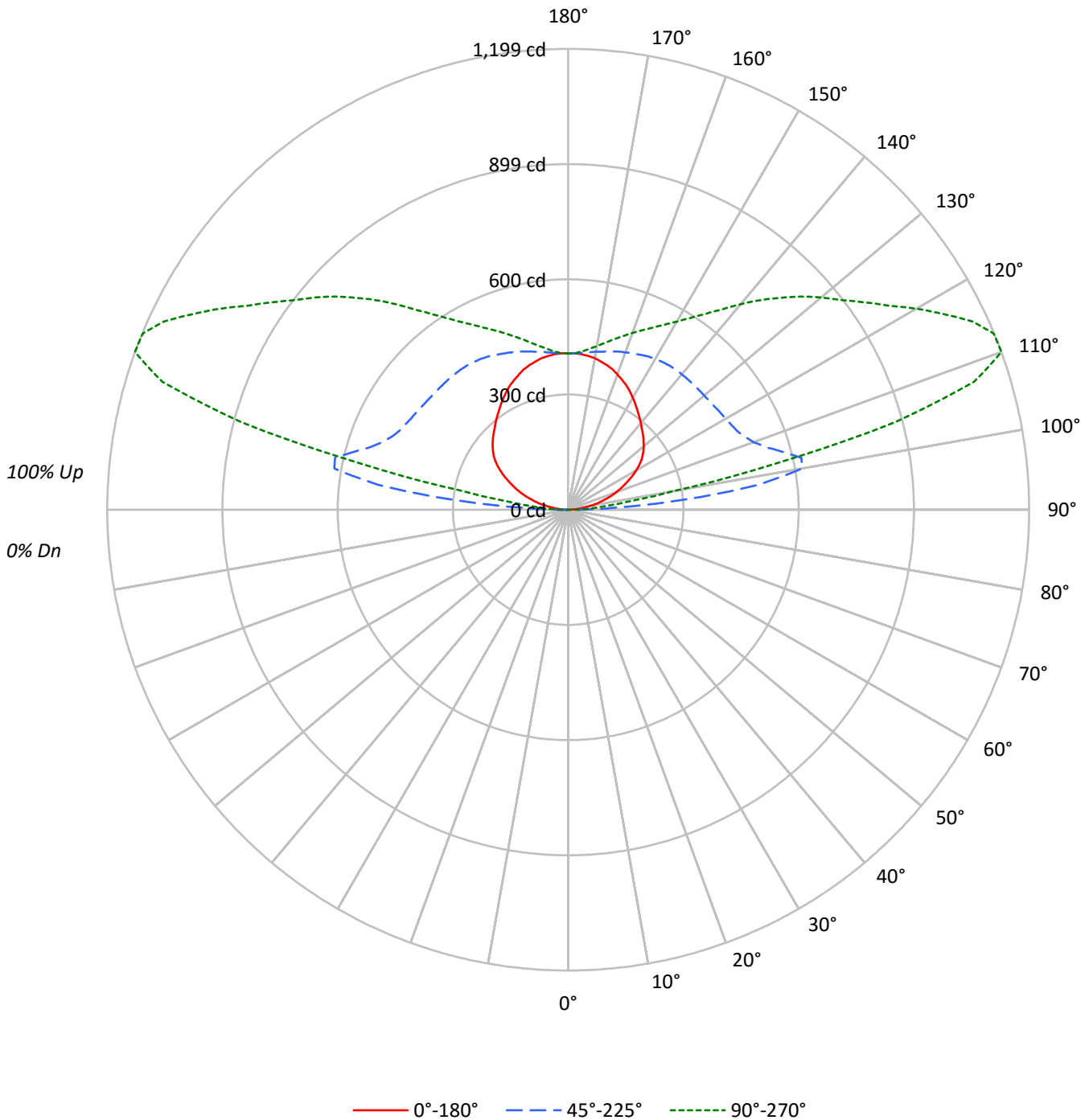
Input Watts (W): 26.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	2.6	0.1
90°-100°	158.4	5.6
100°-110°	558.0	19.7
110°-120°	586.1	20.7
120°-130°	482.1	17.0
130°-140°	387.3	13.7
140°-150°	292.6	10.3
150°-160°	205.7	7.3
160°-170°	121.1	4.3
170°-180°	39.4	1.4
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	2.6	0.1
90°-120°	1302.6	46.0
90°-150°	2464.6	87.0
90°-180°	2831.0	99.9
0°-180°	2833.4	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	11	27	25	26	2
95°	27	67	306	116	89	28
105°	95	144	579	1035	881	101
115°	168	212	485	1000	1159	167
125°	234	278	466	810	940	208
135°	275	328	460	681	779	213
145°	314	361	458	569	622	197
155°	357	386	445	503	523	164
165°	389	401	426	452	459	110
175°	406	406	410	415	414	39
180°	406	406	406	406	406	



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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	3.1	6.3	7.8	9.4	11.7	15.6	21.1	25.8	26.6	25.8
92.5°	11.7	16.4	22.7	26.6	32.8	41.4	62.5	92.2	118.8	120.4	100.8
95°	27.4	30.5	38.3	45.3	57.8	76.6	112.6	180.6	271.3	306.4	268.1
97.5°	40.6	45.3	53.9	64.1	78.2	99.3	145.4	240.0	386.2	499.5	503.4
100°	60.2	62.5	69.6	82.1	97.7	119.6	161.0	256.4	425.2	617.5	730.1
102.5°	78.2	79.7	86.8	99.3	115.7	137.6	175.1	257.2	410.4	621.5	814.5
105°	95.4	98.5	104.0	115.7	132.9	154.8	191.5	261.1	390.1	579.2	787.2
107.5°	114.1	116.5	121.9	132.9	150.1	172.0	207.9	269.7	379.1	540.2	729.3
110°	132.9	136.0	140.7	150.9	167.3	190.0	224.3	280.6	376.0	513.6	675.4



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	150.1	153.2	158.7	168.1	183.7	207.2	240.0	292.4	376.8	496.4	637.9
115°	168.1	172.0	176.7	186.0	201.7	222.8	256.4	304.1	379.9	484.7	608.2
117.5°	186.8	190.0	194.6	203.2	218.1	240.0	271.3	316.6	384.6	478.4	587.8
120°	204.0	207.2	211.8	218.9	234.5	256.4	286.9	329.1	389.3	472.9	572.2
122.5°	220.4	222.8	227.5	235.3	250.9	273.6	301.7	340.0	394.8	469.8	558.9
125°	234.5	236.9	241.5	250.9	266.6	288.4	316.6	351.8	400.2	465.9	546.4
127.5°	246.2	249.4	255.6	265.8	280.6	303.3	330.7	362.7	405.7	463.5	534.7
130°	256.4	259.5	267.3	278.3	293.9	315.8	343.2	372.9	412.0	462.0	523.0
132.5°	265.8	269.7	278.3	290.0	306.4	328.3	354.1	383.0	418.2	461.2	513.6
135°	275.2	278.3	287.7	299.4	317.4	339.3	364.3	391.6	422.9	460.4	505.0
137.5°	283.8	287.7	297.0	309.6	327.5	347.9	372.9	398.7	427.6	460.4	498.7
140°	293.9	297.0	306.4	318.9	336.1	356.5	379.9	404.1	430.7	459.6	493.3
142.5°	304.1	306.4	315.0	327.5	343.9	362.7	385.4	408.8	433.1	459.6	487.8
145°	314.2	317.4	325.2	336.9	352.5	369.7	390.9	412.7	434.6	458.1	483.1
147.5°	325.2	327.5	335.3	346.3	359.6	375.2	395.5	415.1	435.4	455.7	478.4
150°	336.1	338.5	344.7	354.9	366.6	380.7	398.7	416.6	434.6	453.4	472.1
152.5°	347.1	347.9	354.1	362.7	373.7	386.2	401.8	417.4	433.1	449.5	466.7
155°	357.2	358.0	362.7	371.3	379.9	391.6	404.9	418.2	431.5	444.8	459.6
157.5°	365.8	366.6	370.5	378.3	385.4	395.5	407.3	418.2	428.4	440.1	453.4
160°	374.4	375.2	378.3	384.6	390.9	399.4	408.8	418.2	426.0	435.4	446.4
162.5°	383.0	382.3	385.4	390.1	395.5	401.8	409.6	417.4	423.7	431.5	440.1
165°	389.3	388.5	390.1	394.8	398.7	403.4	410.4	415.9	420.6	426.0	433.1
167.5°	394.8	394.0	395.5	398.7	401.8	404.9	410.4	415.1	417.4	421.3	426.0
170°	400.2	398.7	399.4	401.8	403.4	405.7	409.6	413.5	415.1	417.4	420.6
172.5°	403.4	402.6	401.8	404.1	404.9	406.5	408.8	411.2	412.0	412.7	415.1
175°	405.7	404.9	404.1	405.7	405.7	406.5	408.0	409.6	408.8	409.6	410.4
177.5°	407.3	405.7	404.9	406.5	406.5	406.5	407.3	408.8	407.3	406.5	407.3
180°	406.5	406.5	406.5	406.5	406.5	406.5	406.5	406.5	406.5	406.5	406.5



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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°	25.0	23.5	25.0	25.8	25.8	25.8	25.8	25.8
92.5°	79.0	67.2	58.6	52.4	51.6	48.5	49.2	47.7
95°	204.8	157.1	124.3	107.1	96.9	90.7	88.3	89.1
97.5°	419.0	334.6	255.6	208.7	178.2	162.6	154.0	149.3
100°	713.7	616.8	509.7	415.1	350.2	316.6	293.9	279.8
102.5°	906.8	903.6	832.5	730.9	659.0	595.7	566.0	545.6
105°	949.8	1038.1	1048.3	1022.5	974.0	925.5	891.9	881.0
107.5°	903.6	1035.0	1111.6	1142.8	1142.1	1135.0	1124.9	1106.9
110°	840.3	980.3	1080.3	1144.4	1178.0	1192.9	1199.9	1199.1



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	782.5	915.4	1024.0	1099.9	1149.9	1177.2	1192.1	1197.6
115°	737.1	857.5	959.9	1040.4	1095.9	1131.9	1152.2	1159.3
117.5°	699.6	807.5	902.9	979.5	1036.5	1074.8	1095.9	1101.4
120°	673.0	770.0	852.8	924.0	978.7	1015.4	1038.1	1045.9
122.5°	651.9	738.7	816.1	878.6	926.3	962.3	981.8	988.1
125°	631.6	712.1	780.9	839.5	884.9	914.6	934.1	940.4
127.5°	611.3	685.6	751.2	805.9	845.8	873.9	891.1	895.8
130°	591.7	659.0	720.7	772.3	810.6	837.2	852.8	859.1
132.5°	573.0	634.0	689.5	737.1	774.7	801.2	815.3	820.8
135°	555.8	607.4	659.0	702.7	736.4	762.2	776.2	779.4
137.5°	541.7	586.3	628.5	667.6	699.6	722.3	734.8	739.5
140°	528.4	566.0	601.9	636.3	661.3	681.6	693.4	698.1
142.5°	517.5	548.0	577.7	605.0	628.5	646.5	656.6	656.6
145°	507.3	533.1	557.4	580.0	598.8	612.1	619.9	622.2
147.5°	499.5	520.6	540.2	557.4	573.8	584.7	590.2	591.7
150°	490.9	508.1	524.5	538.6	550.3	559.7	564.4	565.2
152.5°	482.3	497.9	511.2	523.0	531.6	539.4	542.5	542.5
155°	474.5	487.0	498.7	507.3	515.9	521.4	524.5	523.0
157.5°	465.1	476.1	486.2	493.3	499.5	504.2	505.8	505.8
160°	456.5	465.1	473.7	479.2	484.7	488.6	489.3	489.3
162.5°	447.9	455.0	462.0	465.9	471.4	473.7	474.5	473.7
165°	439.3	444.8	450.3	453.4	456.5	459.6	459.6	458.9
167.5°	430.7	435.4	439.3	442.4	444.0	445.6	445.6	444.8
170°	424.5	426.8	429.9	431.5	432.3	434.6	433.8	432.3
172.5°	417.4	419.0	421.3	422.1	422.9	423.7	422.9	422.1
175°	412.7	413.5	414.3	415.1	415.1	415.9	415.1	413.5
177.5°	408.8	408.8	409.6	409.6	409.6	409.6	408.8	407.3
180°	406.5	406.5	406.5	406.5	406.5	406.5	406.5	406.5

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