

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: P334452

Luminaire Tested: **S122IP-S725U840-4F0-1E-UDD-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334452
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-S725U840-4F0-1E-UDD-4
Description: DEFINE 2 INDIRECT LED LUMINAIRE, BATWING OPTIC
PENDANT MOUNT, 725 LUMENS PER FOOT
Light Source: 4000K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

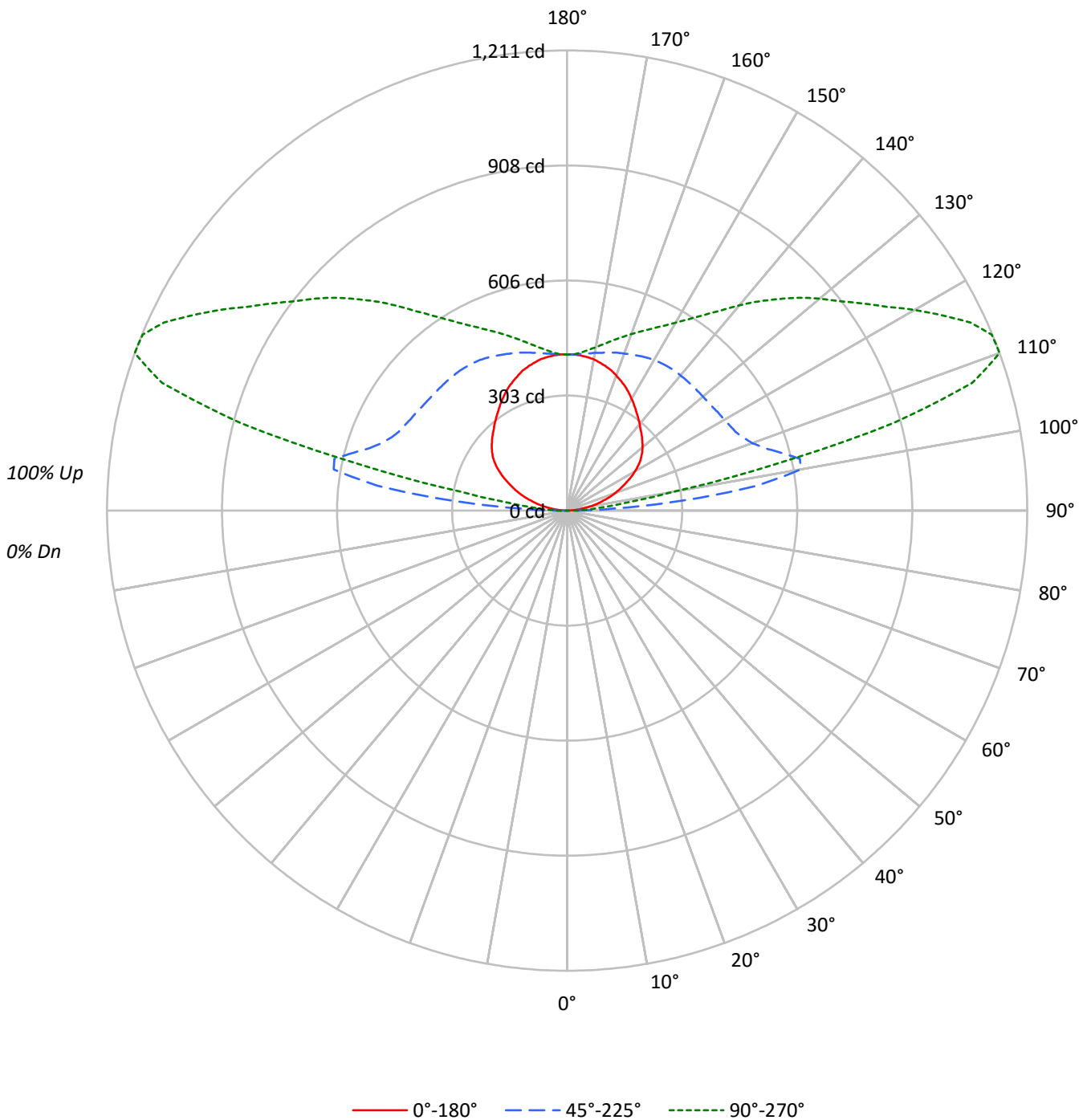
Lumens per Lamp: N/A
Luminaire Lumens: 2861.3 lumens
Efficiency: N/A
Efficacy: 108.4 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Indirect

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°	160.0	5.6
100°-110°	563.5	19.7
110°-120°	591.9	20.7
120°-130°	486.9	17.0
130°-140°	391.2	13.7
140°-150°	295.5	10.3
150°-160°	207.7	7.3
160°-170°	122.3	4.3
170°-180°	39.8	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°	1315.4	46.0
90°-150°	2488.9	87.0
90°-180°	2859.0	99.9
0°-180°	2861.3	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	26	26	2
95°	28	68	309	117	90	29
105°	96	145	585	1046	890	102
115°	170	214	489	1010	1171	168
125°	237	280	470	818	950	211
135°	278	332	465	688	787	215
145°	317	365	463	574	628	199
155°	361	390	449	508	528	166
165°	393	405	430	456	463	111
175°	410	410	414	419	418	39
180°	410	410	410	410	410	



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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	3.2	6.3	7.9	9.5	11.8	15.8	21.3	26.1	26.8	26.1
92.5°	11.8	16.6	22.9	26.8	33.2	41.8	63.2	93.2	120.0	121.6	101.8
95°	27.6	30.8	38.7	45.8	58.4	77.4	113.7	182.4	273.9	309.4	270.8
97.5°	41.0	45.8	54.5	64.7	78.9	100.3	146.8	242.3	390.0	504.4	508.4
100°	60.8	63.2	70.3	82.9	98.7	120.8	162.6	258.9	429.4	623.6	737.3
102.5°	78.9	80.5	87.6	100.3	116.8	138.9	176.8	259.7	414.4	627.6	822.6
105°	96.3	99.5	105.0	116.8	134.2	156.3	193.4	263.7	393.9	585.0	794.9
107.5°	115.3	117.6	123.1	134.2	151.6	173.7	210.0	272.3	382.9	545.5	736.5
110°	134.2	137.4	142.1	152.4	168.9	191.8	226.6	283.4	379.7	518.6	682.1



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	151.6	154.7	160.3	169.7	185.5	209.2	242.3	295.2	380.5	501.3	644.2
115°	169.7	173.7	178.4	187.9	203.7	225.0	258.9	307.1	383.7	489.4	614.2
117.5°	188.7	191.8	196.6	205.2	220.2	242.3	273.9	319.7	388.4	483.1	593.6
120°	206.0	209.2	213.9	221.0	236.8	258.9	289.7	332.3	393.1	477.6	577.9
122.5°	222.6	225.0	229.7	237.6	253.4	276.3	304.7	343.4	398.7	474.4	564.4
125°	236.8	239.2	243.9	253.4	269.2	291.3	319.7	355.2	404.2	470.5	551.8
127.5°	248.7	251.8	258.1	268.4	283.4	306.3	333.9	366.3	409.7	468.1	540.0
130°	258.9	262.1	270.0	281.0	296.8	318.9	346.6	376.5	416.0	466.5	528.1
132.5°	268.4	272.3	281.0	292.9	309.4	331.6	357.6	386.8	422.3	465.8	518.6
135°	277.9	281.0	290.5	302.3	320.5	342.6	367.9	395.5	427.1	465.0	510.0
137.5°	286.6	290.5	300.0	312.6	330.8	351.3	376.5	402.6	431.8	465.0	503.6
140°	296.8	300.0	309.4	322.1	339.4	360.0	383.7	408.1	435.0	464.2	498.1
142.5°	307.1	309.4	318.1	330.8	347.3	366.3	389.2	412.9	437.3	464.2	492.6
145°	317.3	320.5	328.4	340.2	356.0	373.4	394.7	416.8	438.9	462.6	487.9
147.5°	328.4	330.8	338.7	349.7	363.1	378.9	399.4	419.2	439.7	460.2	483.1
150°	339.4	341.8	348.1	358.4	370.2	384.4	402.6	420.8	438.9	457.9	476.8
152.5°	350.5	351.3	357.6	366.3	377.3	390.0	405.8	421.5	437.3	453.9	471.3
155°	360.8	361.6	366.3	375.0	383.7	395.5	408.9	422.3	435.8	449.2	464.2
157.5°	369.4	370.2	374.2	382.1	389.2	399.4	411.3	422.3	432.6	444.4	457.9
160°	378.1	378.9	382.1	388.4	394.7	403.4	412.9	422.3	430.2	439.7	450.8
162.5°	386.8	386.0	389.2	393.9	399.4	405.8	413.7	421.5	427.9	435.8	444.4
165°	393.1	392.3	393.9	398.7	402.6	407.3	414.4	420.0	424.7	430.2	437.3
167.5°	398.7	397.9	399.4	402.6	405.8	408.9	414.4	419.2	421.5	425.5	430.2
170°	404.2	402.6	403.4	405.8	407.3	409.7	413.7	417.6	419.2	421.5	424.7
172.5°	407.3	406.5	405.8	408.1	408.9	410.5	412.9	415.2	416.0	416.8	419.2
175°	409.7	408.9	408.1	409.7	409.7	410.5	412.1	413.7	412.9	413.7	414.4
177.5°	411.3	409.7	408.9	410.5	410.5	410.5	411.3	412.9	411.3	410.5	411.3
180°	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5



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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°	25.3	23.7	25.3	26.1	26.1	26.1	26.1	26.1
92.5°	79.7	67.9	59.2	52.9	52.1	48.9	49.7	48.2
95°	206.8	158.7	125.5	108.1	97.9	91.6	89.2	90.0
97.5°	423.1	337.9	258.1	210.8	180.0	164.2	155.5	150.8
100°	720.7	622.8	514.7	419.2	353.7	319.7	296.8	282.6
102.5°	915.7	912.6	840.7	738.1	665.5	601.5	571.5	551.0
105°	959.1	1048.3	1058.6	1032.6	983.6	934.7	900.7	889.7
107.5°	912.6	1045.2	1122.5	1154.1	1153.3	1146.2	1136.0	1117.8
110°	848.6	989.9	1091.0	1155.7	1189.6	1204.6	1211.7	1211.0



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	790.2	924.4	1034.1	1110.7	1161.2	1188.9	1203.9	1209.4
115°	744.4	866.0	969.4	1050.7	1106.8	1143.1	1163.6	1170.7
117.5°	706.5	815.5	911.8	989.1	1046.8	1085.4	1106.8	1112.3
120°	679.7	777.6	861.2	933.1	988.3	1025.4	1048.3	1056.2
122.5°	658.4	746.0	824.1	887.3	935.5	971.8	991.5	997.8
125°	637.8	719.2	788.6	847.8	893.6	923.6	943.3	949.7
127.5°	617.3	692.3	758.6	813.9	854.1	882.6	899.9	904.7
130°	597.6	665.5	727.8	779.9	818.6	845.5	861.2	867.6
132.5°	578.6	640.2	696.3	744.4	782.3	809.1	823.4	828.9
135°	561.3	613.4	665.5	709.7	743.6	769.7	783.9	787.0
137.5°	547.1	592.1	634.7	674.2	706.5	729.4	742.0	746.8
140°	533.6	571.5	607.8	642.6	667.8	688.4	700.2	704.9
142.5°	522.6	553.4	583.4	611.0	634.7	652.8	663.1	663.1
145°	512.3	538.4	562.9	585.7	604.7	618.1	626.0	628.4
147.5°	504.4	525.7	545.5	562.9	579.4	590.5	596.0	597.6
150°	495.8	513.1	529.7	543.9	555.7	565.2	570.0	570.7
152.5°	487.1	502.9	516.3	528.1	536.8	544.7	547.9	547.9
155°	479.2	491.8	503.6	512.3	521.0	526.5	529.7	528.1
157.5°	469.7	480.8	491.0	498.1	504.4	509.2	510.8	510.8
160°	461.0	469.7	478.4	483.9	489.4	493.4	494.2	494.2
162.5°	452.3	459.4	466.5	470.5	476.0	478.4	479.2	478.4
165°	443.7	449.2	454.7	457.9	461.0	464.2	464.2	463.4
167.5°	435.0	439.7	443.7	446.8	448.4	450.0	450.0	449.2
170°	428.7	431.0	434.2	435.8	436.5	438.9	438.1	436.5
172.5°	421.5	423.1	425.5	426.3	427.1	427.9	427.1	426.3
175°	416.8	417.6	418.4	419.2	419.2	420.0	419.2	417.6
177.5°	412.9	412.9	413.7	413.7	413.7	413.7	412.9	411.3
180°	410.5	410.5	410.5	410.5	410.5	410.5	410.5	410.5

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