

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: P334466

Luminaire Tested: **S122IP-S530U935-4F0-1E-UDD-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334466
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-S530U935-4F0-1E-UDD-4
Description: DEFINE 2 INDIRECT LED LUMINAIRE, BATWING OPTIC
PENDANT MOUNT, 530 LUMENS PER FOOT
Light Source: 3500K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

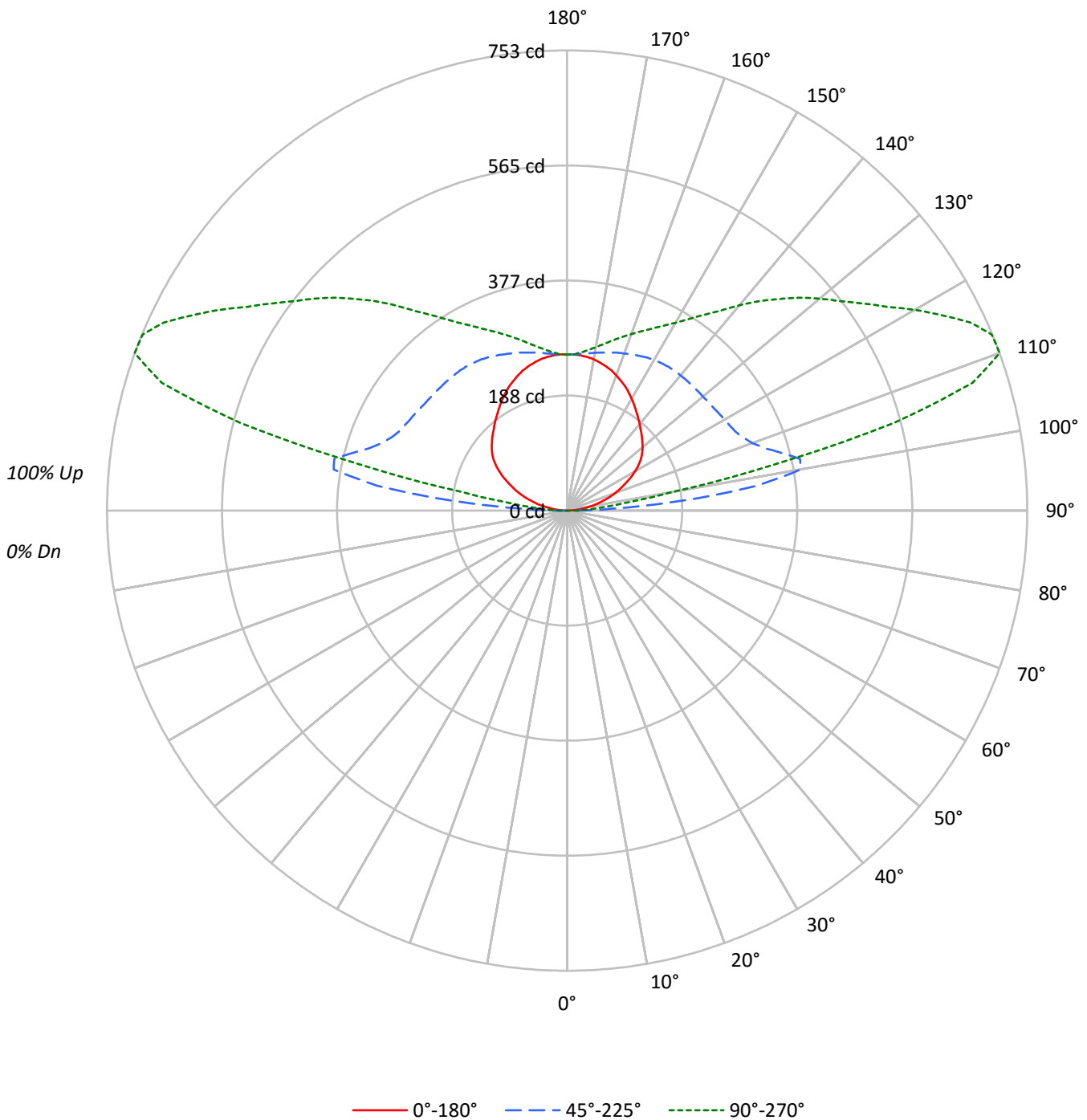
Lumens per Lamp: N/A
Luminaire Lumens: 1779.8 lumens
Efficiency: N/A
Efficacy: 94.7 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Indirect

Input Watts (W): 18.8
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°	1.6	0.1
90°-100°	99.5	5.6
100°-110°	350.5	19.7
110°-120°	368.1	20.7
120°-130°	302.9	17.0
130°-140°	243.3	13.7
140°-150°	183.8	10.3
150°-160°	129.2	7.3
160°-170°	76.1	4.3
170°-180°	24.7	1.4
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	1.6	0.1
90°-120°	818.2	46.0
90°-150°	1548.1	87.0
90°-180°	1778.0	99.9
0°-180°	1779.8	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°	0	7	17	16	16	1
95°	17	42	192	73	56	18
105°	60	90	364	650	553	64
115°	106	133	304	628	728	105
125°	147	174	293	509	591	131
135°	173	206	289	428	490	133
145°	197	227	288	357	391	124
155°	224	242	279	316	328	103
165°	244	252	268	284	288	69
175°	255	255	257	260	260	24
180°	255	255	255	255	255	



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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°	0.5	2.0	3.9	4.9	5.9	7.4	9.8	13.3	16.2	16.7	16.2
92.5°	7.4	10.3	14.2	16.7	20.6	26.0	39.3	57.9	74.6	75.6	63.3
95°	17.2	19.1	24.1	28.5	36.3	48.1	70.7	113.4	170.4	192.5	168.4
97.5°	25.5	28.5	33.9	40.3	49.1	62.4	91.3	150.7	242.6	313.8	316.2
100°	37.8	39.3	43.7	51.6	61.4	75.1	101.1	161.1	267.1	387.9	458.6
102.5°	49.1	50.1	54.5	62.4	72.7	86.4	110.0	161.5	257.8	390.4	511.6
105°	59.9	61.9	65.3	72.7	83.5	97.2	120.3	164.0	245.0	363.8	494.5
107.5°	71.7	73.2	76.6	83.5	94.3	108.0	130.6	169.4	238.1	339.3	458.1
110°	83.5	85.4	88.4	94.8	105.1	119.3	140.9	176.3	236.2	322.6	424.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	94.3	96.2	99.7	105.6	115.4	130.1	150.7	183.6	236.7	311.8	400.7
115°	105.6	108.0	111.0	116.9	126.7	139.9	161.1	191.0	238.6	304.4	382.0
117.5°	117.4	119.3	122.3	127.7	137.0	150.7	170.4	198.9	241.6	300.5	369.2
120°	128.2	130.1	133.1	137.5	147.3	161.1	180.2	206.7	244.5	297.1	359.4
122.5°	138.5	139.9	142.9	147.8	157.6	171.9	189.5	213.6	248.0	295.1	351.1
125°	147.3	148.8	151.7	157.6	167.4	181.2	198.9	221.0	251.4	292.6	343.2
127.5°	154.7	156.6	160.6	166.9	176.3	190.5	207.7	227.8	254.8	291.2	335.9
130°	161.1	163.0	167.9	174.8	184.6	198.4	215.6	234.2	258.8	290.2	328.5
132.5°	166.9	169.4	174.8	182.2	192.5	206.2	222.4	240.6	262.7	289.7	322.6
135°	172.8	174.8	180.7	188.1	199.4	213.1	228.8	246.0	265.6	289.2	317.2
137.5°	178.2	180.7	186.6	194.4	205.7	218.5	234.2	250.4	268.6	289.2	313.3
140°	184.6	186.6	192.5	200.3	211.1	223.9	238.6	253.9	270.6	288.7	309.8
142.5°	191.0	192.5	197.9	205.7	216.0	227.8	242.1	256.8	272.0	288.7	306.4
145°	197.4	199.4	204.3	211.6	221.4	232.3	245.5	259.3	273.0	287.7	303.4
147.5°	204.3	205.7	210.6	217.5	225.9	235.7	248.5	260.7	273.5	286.3	300.5
150°	211.1	212.6	216.5	222.9	230.3	239.1	250.4	261.7	273.0	284.8	296.6
152.5°	218.0	218.5	222.4	227.8	234.7	242.6	252.4	262.2	272.0	282.3	293.1
155°	224.4	224.9	227.8	233.2	238.6	246.0	254.3	262.7	271.0	279.4	288.7
157.5°	229.8	230.3	232.7	237.7	242.1	248.5	255.8	262.7	269.1	276.4	284.8
160°	235.2	235.7	237.7	241.6	245.5	250.9	256.8	262.7	267.6	273.5	280.4
162.5°	240.6	240.1	242.1	245.0	248.5	252.4	257.3	262.2	266.1	271.0	276.4
165°	244.5	244.0	245.0	248.0	250.4	253.4	257.8	261.2	264.2	267.6	272.0
167.5°	248.0	247.5	248.5	250.4	252.4	254.3	257.8	260.7	262.2	264.7	267.6
170°	251.4	250.4	250.9	252.4	253.4	254.8	257.3	259.7	260.7	262.2	264.2
172.5°	253.4	252.9	252.4	253.9	254.3	255.3	256.8	258.3	258.8	259.3	260.7
175°	254.8	254.3	253.9	254.8	254.8	255.3	256.3	257.3	256.8	257.3	257.8
177.5°	255.8	254.8	254.3	255.3	255.3	255.3	255.8	256.8	255.8	255.3	255.8
180°	255.3	255.3	255.3	255.3	255.3	255.3	255.3	255.3	255.3	255.3	255.3



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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°	15.7	14.7	15.7	16.2	16.2	16.2	16.2	16.2
92.5°	49.6	42.2	36.8	32.9	32.4	30.4	30.9	30.0
95°	128.6	98.7	78.1	67.3	60.9	57.0	55.5	56.0
97.5°	263.2	210.2	160.6	131.1	112.0	102.1	96.7	93.8
100°	448.3	387.4	320.1	260.7	220.0	198.9	184.6	175.8
102.5°	569.6	567.6	522.9	459.1	413.9	374.2	355.5	342.7
105°	596.6	652.1	658.5	642.3	611.8	581.4	560.3	553.4
107.5°	567.6	650.1	698.2	717.9	717.4	713.0	706.6	695.3
110°	527.8	615.7	678.6	718.8	740.0	749.3	753.7	753.2



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	491.5	575.0	643.2	690.9	722.3	739.5	748.8	752.2
115°	463.0	538.6	603.0	653.5	688.4	711.0	723.8	728.2
117.5°	439.5	507.2	567.1	615.2	651.1	675.1	688.4	691.8
120°	422.8	483.7	535.7	580.4	614.8	637.8	652.1	657.0
122.5°	409.5	464.0	512.6	551.9	581.9	604.4	616.7	620.6
125°	396.7	447.3	490.5	527.4	555.8	574.5	586.8	590.7
127.5°	384.0	430.6	471.9	506.2	531.3	549.0	559.8	562.7
130°	371.7	413.9	452.7	485.1	509.2	525.9	535.7	539.6
132.5°	359.9	398.2	433.1	463.0	486.6	503.3	512.1	515.6
135°	349.1	381.5	413.9	441.4	462.5	478.7	487.6	489.5
137.5°	340.3	368.3	394.8	419.3	439.5	453.7	461.6	464.5
140°	331.9	355.5	378.1	399.7	415.4	428.2	435.5	438.5
142.5°	325.1	344.2	362.9	380.0	394.8	406.1	412.5	412.5
145°	318.7	334.9	350.1	364.3	376.1	384.5	389.4	390.9
147.5°	313.8	327.0	339.3	350.1	360.4	367.3	370.7	371.7
150°	308.4	319.2	329.5	338.3	345.7	351.6	354.5	355.0
152.5°	303.0	312.8	321.1	328.5	333.9	338.8	340.8	340.8
155°	298.0	305.9	313.3	318.7	324.1	327.5	329.5	328.5
157.5°	292.2	299.0	305.4	309.8	313.8	316.7	317.7	317.7
160°	286.8	292.2	297.6	301.0	304.4	306.9	307.4	307.4
162.5°	281.4	285.8	290.2	292.6	296.1	297.6	298.0	297.6
165°	276.0	279.4	282.8	284.8	286.8	288.7	288.7	288.2
167.5°	270.6	273.5	276.0	277.9	278.9	279.9	279.9	279.4
170°	266.6	268.1	270.1	271.0	271.5	273.0	272.5	271.5
172.5°	262.2	263.2	264.7	265.1	265.6	266.1	265.6	265.1
175°	259.3	259.7	260.2	260.7	260.7	261.2	260.7	259.7
177.5°	256.8	256.8	257.3	257.3	257.3	257.3	256.8	255.8
180°	255.3	255.3	255.3	255.3	255.3	255.3	255.3	255.3

(END OF REPORT)