

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: P334986

Luminaire Tested: **S125IP-S590U930-4F0-1E-UDD-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334986
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-1807-864-19)
Test Lab: INNOVATION CENTER
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: NEO-RAY
Catalog Number: S125IP-S590U930-4F0-1E-UDD-4
Description: DEFINE 5 INDIRECT LED LUMINAIRE, BATWING OPTIC
PENDANT MOUNT, 590 LUMENS PER FOOT
Light Source: 3000K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

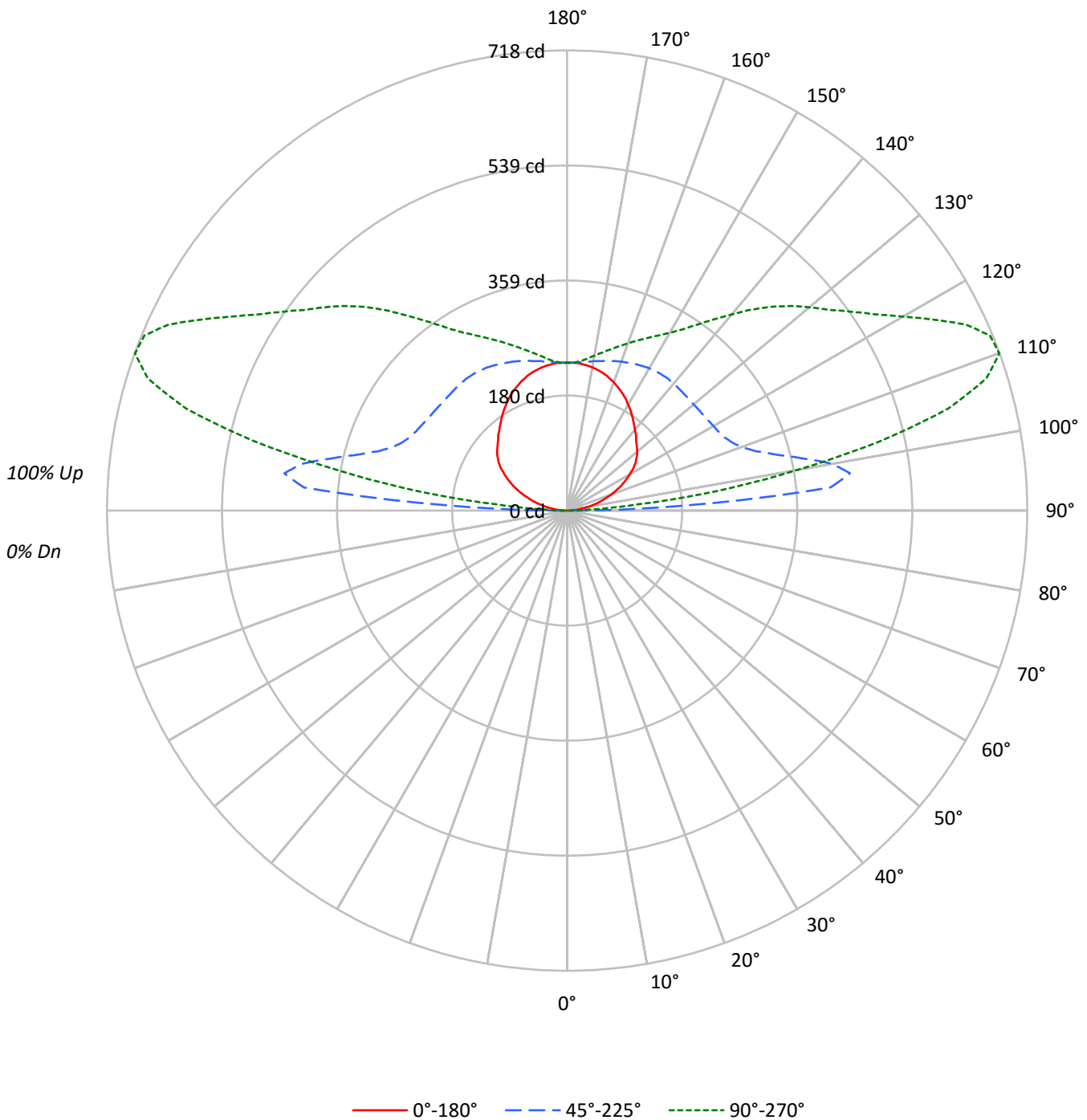
Lumens per Lamp: N/A
Luminaire Lumens: 1733.5 lumens
Efficiency: N/A
Efficacy: 92.2 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Indirect

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°	0.9	0.1
90°-100°	167.8	9.7
100°-110°	361.8	20.9
110°-120°	337.3	19.5
120°-130°	273.2	15.8
130°-140°	219.4	12.7
140°-150°	165.5	9.5
150°-160°	116.5	6.7
160°-170°	68.7	4.0
170°-180°	22.3	1.3
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	0.9	0.1
90°-120°	867.0	50.0
90°-150°	1525.0	88.0
90°-180°	1733.0	100.0
0°-180°	1733.5	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	4	7	10	11	1
95°	15	45	412	187	109	16
105°	53	74	337	664	616	55
115°	94	113	271	583	686	92
125°	130	153	260	464	541	116
135°	152	183	258	389	449	118
145°	178	203	259	322	354	111
155°	203	218	252	285	297	93
165°	221	227	242	256	260	62
175°	230	230	232	235	234	22
180°	231	231	231	231	231	



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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	0.9	1.9	2.8	3.7	4.7	5.1	6.0	6.5	7.4	7.9
92.5°	7.0	8.4	13.0	20.0	29.8	46.5	78.1	131.1	188.8	185.6	149.8
95°	15.3	15.8	19.5	24.6	34.9	55.8	105.6	207.9	336.2	412.1	403.2
97.5°	23.7	24.2	27.0	32.1	41.4	56.7	91.2	169.8	308.3	445.1	503.7
100°	32.6	33.5	35.3	40.5	49.3	63.2	90.2	150.7	267.9	420.0	536.2
102.5°	42.3	42.8	44.2	49.8	57.7	71.2	94.4	142.8	237.2	375.8	516.7
105°	52.6	52.6	54.9	59.5	67.0	80.0	100.5	141.8	219.5	337.2	470.7
107.5°	62.3	63.2	65.6	69.3	77.2	88.8	108.8	145.1	210.2	308.3	426.9
110°	73.0	73.9	75.8	80.0	87.0	99.1	118.1	150.2	206.5	289.3	390.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	83.7	84.6	86.0	90.2	97.2	108.8	127.0	156.7	206.5	278.1	363.7
115°	93.9	94.9	96.3	100.5	107.4	119.1	136.3	163.2	207.9	270.7	345.5
117.5°	103.2	104.6	106.0	110.2	118.1	129.3	145.6	170.7	210.2	266.5	333.5
120°	112.5	113.9	115.8	120.0	127.9	139.5	155.8	178.1	213.9	263.7	323.7
122.5°	122.3	123.2	124.6	128.8	137.7	149.3	165.6	186.5	217.2	261.4	315.3
125°	130.2	131.1	133.5	137.7	146.5	158.6	173.9	193.9	220.9	259.5	307.9
127.5°	136.7	138.1	140.9	146.0	155.3	167.4	182.3	200.9	225.1	258.6	300.9
130°	142.8	144.2	147.9	153.9	163.7	175.8	190.2	207.9	228.8	257.6	293.9
132.5°	147.4	149.3	153.9	160.9	171.1	183.2	197.7	213.9	233.0	257.6	288.3
135°	152.5	154.4	160.0	167.4	177.2	189.7	204.2	219.5	236.7	257.6	284.2
137.5°	159.1	160.4	165.6	173.0	182.8	195.8	208.8	223.7	240.4	258.1	280.0
140°	164.6	166.0	171.6	179.1	187.9	200.4	213.9	227.9	242.8	258.6	277.2
142.5°	171.1	172.1	177.2	184.6	193.0	204.6	217.2	230.2	244.2	259.0	274.9
145°	177.7	178.6	183.2	189.7	198.1	208.8	220.9	232.5	245.1	258.6	272.5
147.5°	184.6	185.1	189.3	195.3	202.8	212.5	223.2	233.9	245.6	257.6	270.2
150°	190.7	191.6	194.9	200.9	207.4	215.3	225.6	235.3	245.6	256.3	267.4
152.5°	197.2	197.7	200.4	205.6	211.6	218.6	227.9	236.3	245.1	254.4	264.2
155°	202.8	202.8	205.6	210.2	214.9	221.4	229.3	236.7	244.2	252.1	260.4
157.5°	207.9	207.9	210.2	214.4	218.6	223.7	230.7	237.2	243.2	249.7	257.2
160°	213.0	212.5	214.4	217.7	221.4	225.6	231.6	237.2	241.8	247.4	253.0
162.5°	217.2	216.7	218.6	221.4	224.2	227.4	232.5	236.7	240.4	244.6	249.3
165°	221.4	220.4	221.8	224.2	226.0	228.8	232.5	236.3	239.0	241.8	245.6
167.5°	224.2	223.7	224.6	226.0	227.4	229.3	232.5	235.3	236.7	239.0	241.8
170°	227.0	226.5	227.0	227.9	228.8	230.2	232.5	234.4	235.3	236.7	238.6
172.5°	228.8	227.9	228.3	229.3	229.7	230.2	232.1	233.5	233.5	233.9	235.3
175°	230.2	229.3	229.7	230.2	230.2	230.2	231.6	232.5	232.1	232.1	232.5
177.5°	231.1	230.2	230.2	230.7	230.2	230.2	231.1	231.6	230.7	230.7	231.1
180°	230.7	230.7	230.7	230.7	230.7	230.7	230.7	230.7	230.7	230.7	230.7



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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°	8.4	8.8	9.3	10.2	10.2	10.2	10.7	10.7
92.5°	100.9	72.6	53.9	45.1	37.7	36.3	35.3	34.4
95°	334.4	263.7	206.5	167.4	134.4	120.5	116.7	109.3
97.5°	479.5	423.2	365.5	309.7	281.8	257.6	245.1	239.5
100°	572.0	549.2	501.3	453.0	420.9	387.4	370.2	362.8
102.5°	603.2	626.4	609.7	580.9	546.0	524.6	505.5	500.4
105°	582.3	646.0	666.4	661.3	646.4	631.1	621.8	616.2
107.5°	539.5	623.7	673.0	693.4	697.6	695.3	690.6	686.0
110°	491.1	579.5	645.1	684.6	705.5	714.3	717.6	717.6



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	453.0	535.8	602.3	650.6	683.7	700.4	709.7	713.9
115°	422.3	494.4	558.1	608.8	645.1	667.4	680.4	686.4
117.5°	400.9	464.6	520.4	568.3	605.1	628.3	641.3	645.1
120°	384.1	440.0	491.1	532.0	566.5	588.8	601.3	605.1
122.5°	371.6	422.3	466.5	504.1	533.9	553.9	566.5	569.7
125°	359.5	406.9	447.4	480.9	506.9	526.0	536.2	540.9
127.5°	346.9	392.1	430.2	461.8	485.5	502.7	512.5	514.4
130°	335.3	376.2	412.5	442.7	466.0	481.3	490.6	493.4
132.5°	323.7	361.4	393.4	422.3	445.5	460.9	469.3	472.5
135°	313.9	346.0	375.8	402.3	422.7	438.1	446.5	449.3
137.5°	305.1	332.1	357.6	380.9	399.5	413.9	421.8	425.1
140°	298.1	320.0	341.4	360.9	378.1	390.2	397.2	399.5
142.5°	292.1	309.7	327.4	343.7	357.6	367.4	373.9	375.8
145°	286.9	301.4	315.8	328.3	339.5	347.4	352.5	354.4
147.5°	281.8	293.9	305.6	315.3	324.6	331.1	334.4	335.3
150°	277.6	287.9	296.7	305.1	312.1	317.6	319.5	320.0
152.5°	273.0	281.8	289.7	295.8	301.4	305.6	307.4	307.9
155°	268.3	275.8	282.3	287.4	292.1	295.3	296.7	297.2
157.5°	263.7	270.2	275.3	279.5	283.2	286.0	287.4	287.4
160°	259.0	263.7	268.3	271.6	274.9	277.2	278.1	277.6
162.5°	253.9	258.1	261.8	264.6	266.9	268.8	268.8	268.8
165°	249.3	252.5	255.3	257.6	259.5	260.4	260.4	260.4
167.5°	244.6	247.0	249.3	251.1	252.1	253.0	252.5	252.5
170°	240.9	242.3	243.7	244.6	245.6	246.0	246.0	245.6
172.5°	236.7	238.1	239.0	239.5	239.5	240.4	239.5	239.0
175°	233.9	233.9	234.9	234.9	234.9	235.3	234.4	233.9
177.5°	231.6	232.1	232.1	232.1	231.6	232.1	230.7	230.7
180°	230.7	230.7	230.7	230.7	230.7	230.7	230.7	230.7

(END OF REPORT)