

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: P334446

Luminaire Tested: **S122IP-S530U835-4F0-1E-UDD-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334446
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-S530U835-4F0-1E-UDD-4
Description: DEFINE 2 INDIRECT LED LUMINAIRE, BATWING OPTIC
PENDANT MOUNT, 530 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

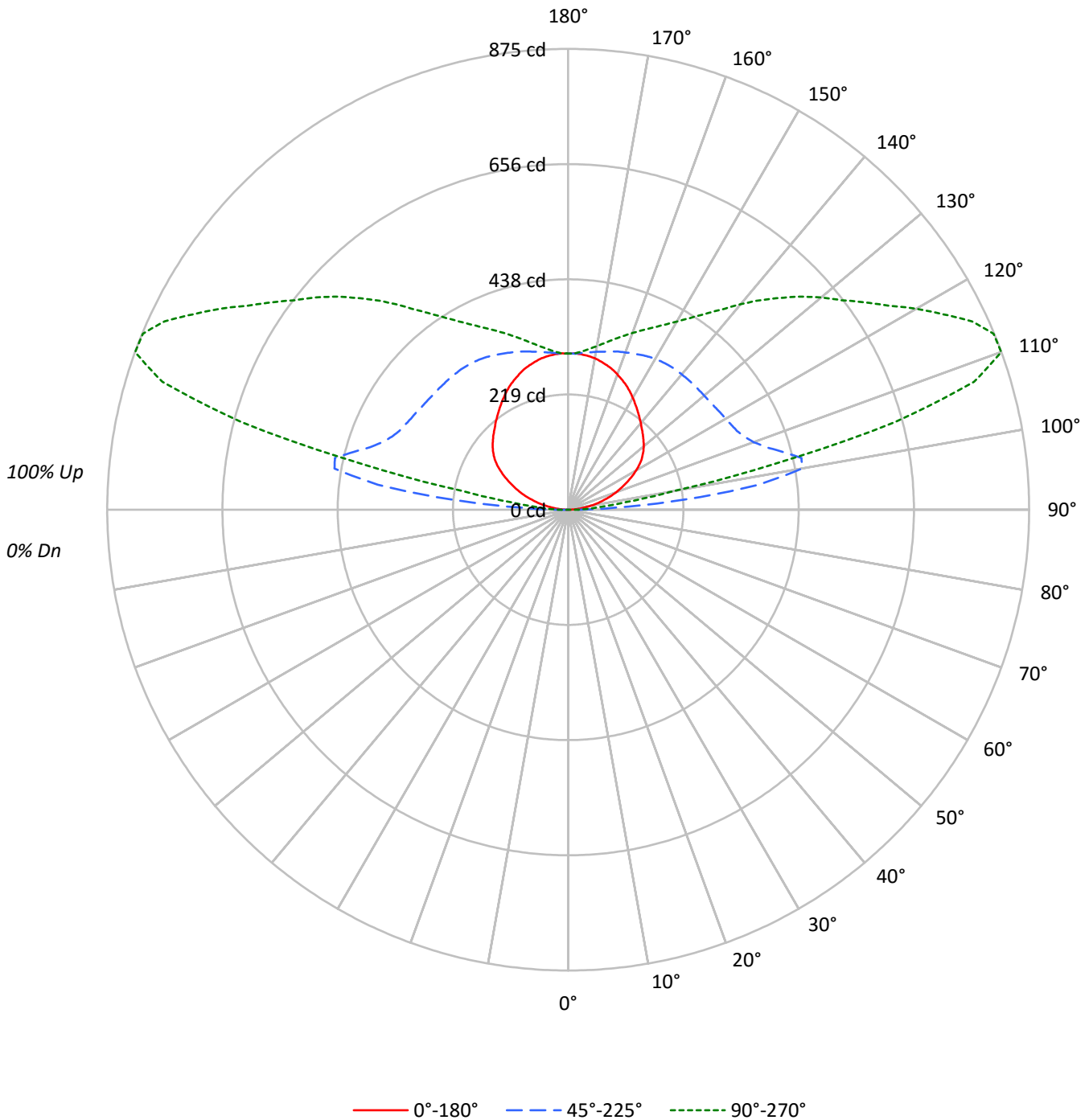
Lumens per Lamp: N/A
Luminaire Lumens: 2067.1 lumens
Efficiency: N/A
Efficacy: 110.0 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.17' x L: 4' x H: 0')
CIE Type: Indirect

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°	1.9	0.1
90°-100°	115.6	5.6
100°-110°	407.1	19.7
110°-120°	427.6	20.7
120°-130°	351.8	17.0
130°-140°	282.6	13.7
140°-150°	213.4	10.3
150°-160°	150.1	7.3
160°-170°	88.3	4.3
170°-180°	28.7	1.4
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	1.9	0.1
90°-120°	950.3	46.0
90°-150°	1798.1	87.0
90°-180°	2065.0	99.9
0°-180°	2067.1	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	8	19	18	19	1
95°	20	49	224	84	65	21
105°	70	105	423	755	643	74
115°	123	155	354	730	846	122
125°	171	202	340	591	686	152
135°	201	240	336	497	569	155
145°	229	263	334	415	454	144
155°	261	281	324	367	382	120
165°	284	293	311	330	335	80
175°	296	296	299	303	302	28
180°	296	296	296	296	296	



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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°	0.6	2.3	4.6	5.7	6.8	8.6	11.4	15.4	18.8	19.4	18.8
92.5°	8.6	12.0	16.5	19.4	24.0	30.2	45.6	67.3	86.7	87.8	73.6
95°	20.0	22.2	27.9	33.1	42.2	55.9	82.1	131.7	197.9	223.6	195.6
97.5°	29.7	33.1	39.3	46.8	57.0	72.4	106.1	175.1	281.7	364.4	367.3
100°	43.9	45.6	50.8	59.9	71.3	87.3	117.5	187.1	310.2	450.5	532.6
102.5°	57.0	58.2	63.3	72.4	84.4	100.4	127.7	187.6	299.4	453.4	594.2
105°	69.6	71.9	75.8	84.4	96.9	112.9	139.7	190.5	284.6	422.6	574.3
107.5°	83.3	85.0	89.0	96.9	109.5	125.5	151.7	196.7	276.6	394.1	532.1
110°	96.9	99.2	102.7	110.1	122.0	138.6	163.7	204.7	274.3	374.7	492.7



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	109.5	111.8	115.8	122.6	134.0	151.1	175.1	213.3	274.9	362.1	465.4
115°	122.6	125.5	128.9	135.7	147.1	162.5	187.1	221.8	277.2	353.6	443.7
117.5°	136.3	138.6	142.0	148.3	159.1	175.1	197.9	231.0	280.6	349.0	428.9
120°	148.8	151.1	154.5	159.7	171.1	187.1	209.3	240.1	284.0	345.0	417.5
122.5°	160.8	162.5	166.0	171.7	183.1	199.6	220.1	248.1	288.0	342.7	407.8
125°	171.1	172.8	176.2	183.1	194.5	210.4	231.0	256.6	292.0	339.9	398.6
127.5°	179.6	181.9	186.5	193.9	204.7	221.3	241.2	264.6	296.0	338.2	390.1
130°	187.1	189.3	195.0	203.0	214.4	230.4	250.4	272.0	300.5	337.0	381.5
132.5°	193.9	196.7	203.0	211.6	223.6	239.5	258.3	279.4	305.1	336.5	374.7
135°	200.7	203.0	209.9	218.4	231.5	247.5	265.8	285.7	308.5	335.9	368.4
137.5°	207.0	209.9	216.7	225.8	239.0	253.8	272.0	290.8	311.9	335.9	363.8
140°	214.4	216.7	223.6	232.7	245.2	260.1	277.2	294.8	314.2	335.3	359.9
142.5°	221.8	223.6	229.8	239.0	250.9	264.6	281.2	298.3	315.9	335.3	355.9
145°	229.3	231.5	237.2	245.8	257.2	269.7	285.1	301.1	317.1	334.2	352.4
147.5°	237.2	239.0	244.7	252.6	262.3	273.7	288.6	302.8	317.7	332.5	349.0
150°	245.2	246.9	251.5	258.9	267.5	277.7	290.8	304.0	317.1	330.8	344.5
152.5°	253.2	253.8	258.3	264.6	272.6	281.7	293.1	304.5	315.9	327.9	340.5
155°	260.6	261.2	264.6	270.9	277.2	285.7	295.4	305.1	314.8	324.5	335.3
157.5°	266.9	267.5	270.3	276.0	281.2	288.6	297.1	305.1	312.5	321.1	330.8
160°	273.2	273.7	276.0	280.6	285.1	291.4	298.3	305.1	310.8	317.7	325.6
162.5°	279.4	278.9	281.2	284.6	288.6	293.1	298.8	304.5	309.1	314.8	321.1
165°	284.0	283.4	284.6	288.0	290.8	294.3	299.4	303.4	306.8	310.8	315.9
167.5°	288.0	287.4	288.6	290.8	293.1	295.4	299.4	302.8	304.5	307.4	310.8
170°	292.0	290.8	291.4	293.1	294.3	296.0	298.8	301.7	302.8	304.5	306.8
172.5°	294.3	293.7	293.1	294.8	295.4	296.5	298.3	300.0	300.5	301.1	302.8
175°	296.0	295.4	294.8	296.0	296.0	296.5	297.7	298.8	298.3	298.8	299.4
177.5°	297.1	296.0	295.4	296.5	296.5	296.5	297.1	298.3	297.1	296.5	297.1
180°	296.5	296.5	296.5	296.5	296.5	296.5	296.5	296.5	296.5	296.5	296.5



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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°	18.2	17.1	18.2	18.8	18.8	18.8	18.8	18.8
92.5°	57.6	49.0	42.8	38.2	37.6	35.4	35.9	34.8
95°	149.4	114.6	90.7	78.1	70.7	66.2	64.4	65.0
97.5°	305.7	244.1	186.5	152.3	130.0	118.6	112.3	108.9
100°	520.7	450.0	371.8	302.8	255.5	231.0	214.4	204.2
102.5°	661.5	659.3	607.4	533.2	480.8	434.6	412.9	398.1
105°	692.9	757.3	764.8	745.9	710.6	675.2	650.7	642.7
107.5°	659.3	755.1	810.9	833.8	833.2	828.1	820.6	807.5
110°	613.1	715.1	788.1	834.9	859.4	870.3	875.4	874.8



TEST NUMBER: P334446

CATALOG NUMBER: S122IP-S530U835-4F0-1E-UDD-4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	570.9	667.8	747.1	802.4	838.9	858.9	869.7	873.7
115°	537.8	625.6	700.3	759.1	799.5	825.8	840.6	845.7
117.5°	510.4	589.1	658.7	714.6	756.2	784.1	799.5	803.5
120°	491.0	561.7	622.2	674.1	714.0	740.8	757.3	763.0
122.5°	475.6	538.9	595.4	641.0	675.8	702.0	716.3	720.8
125°	460.8	519.5	569.7	612.5	645.6	667.2	681.5	686.1
127.5°	446.0	500.1	548.0	588.0	617.1	637.6	650.1	653.5
130°	431.7	480.8	525.8	563.4	591.4	610.8	622.2	626.7
132.5°	418.0	462.5	503.0	537.8	565.2	584.5	594.8	598.8
135°	405.5	443.1	480.8	512.7	537.2	556.0	566.3	568.6
137.5°	395.2	427.7	458.5	487.0	510.4	526.9	536.1	539.5
140°	385.5	412.9	439.1	464.2	482.5	497.3	505.8	509.3
142.5°	377.5	399.8	421.4	441.4	458.5	471.6	479.0	479.0
145°	370.1	388.9	406.6	423.2	436.8	446.5	452.2	453.9
147.5°	364.4	379.8	394.1	406.6	418.6	426.6	430.6	431.7
150°	358.1	370.7	382.7	392.9	401.5	408.3	411.7	412.3
152.5°	351.9	363.3	373.0	381.5	387.8	393.5	395.8	395.8
155°	346.2	355.3	363.8	370.1	376.4	380.4	382.7	381.5
157.5°	339.3	347.3	354.7	359.9	364.4	367.8	369.0	369.0
160°	333.0	339.3	345.6	349.6	353.6	356.4	357.0	357.0
162.5°	326.8	331.9	337.0	339.9	343.9	345.6	346.2	345.6
165°	320.5	324.5	328.5	330.8	333.0	335.3	335.3	334.8
167.5°	314.2	317.7	320.5	322.8	323.9	325.1	325.1	324.5
170°	309.7	311.4	313.7	314.8	315.4	317.1	316.5	315.4
172.5°	304.5	305.7	307.4	308.0	308.5	309.1	308.5	308.0
175°	301.1	301.7	302.3	302.8	302.8	303.4	302.8	301.7
177.5°	298.3	298.3	298.8	298.8	298.8	298.8	298.3	297.1
180°	296.5	296.5	296.5	296.5	296.5	296.5	296.5	296.5

(END OF REPORT)