

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: P334981

Luminaire Tested: **S125IP-S590U927-4F0-1E-UDD-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334981
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-S590U927-4F0-1E-UDD-4
Description: DEFINE 5 INDIRECT LED LUMINAIRE, BATWING OPTIC
PENDANT MOUNT, 590 LUMENS PER FOOT
Light Source: 2700K CCT, 90 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

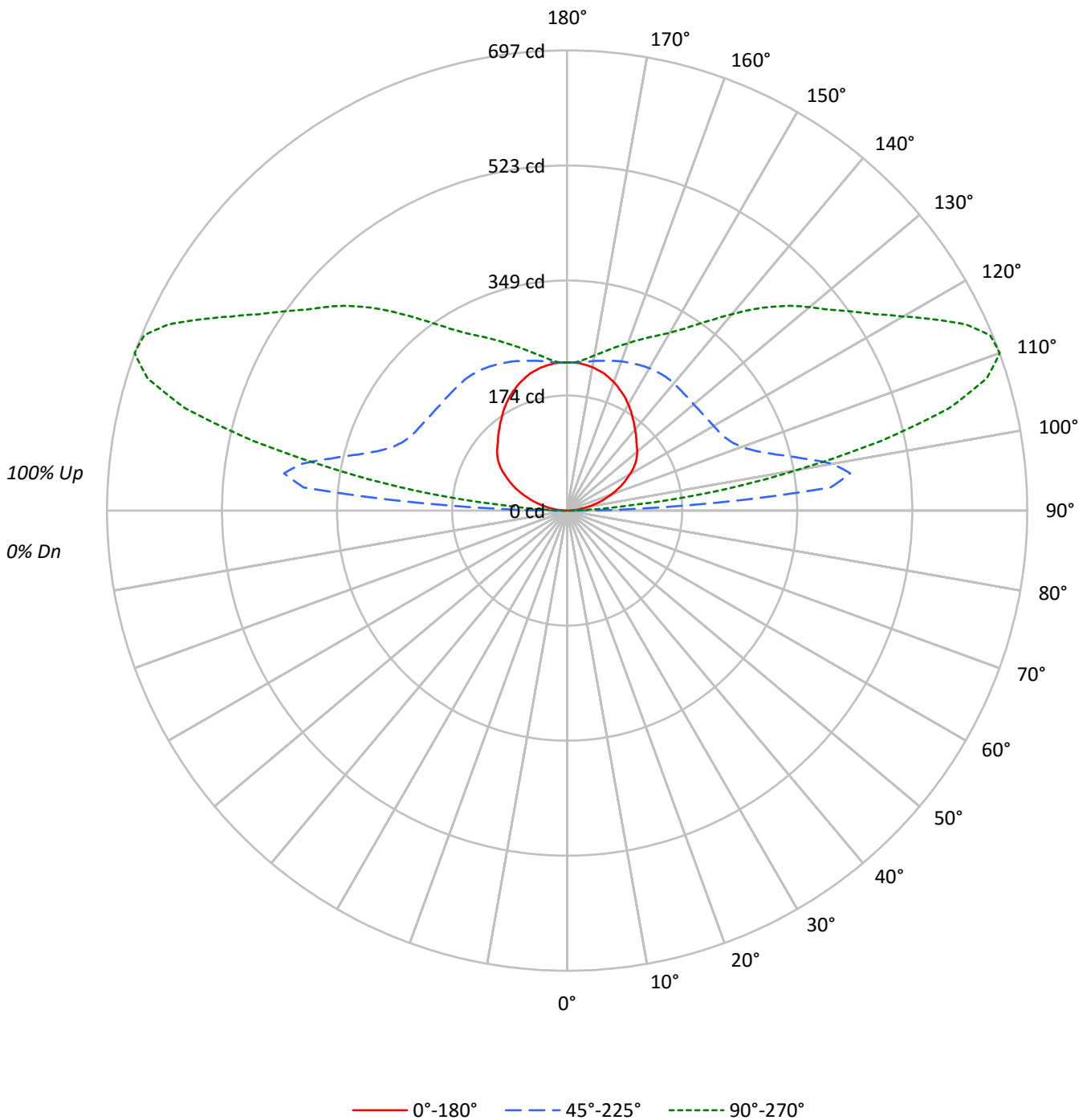
Lumens per Lamp: N/A
Luminaire Lumens: 1684.3 lumens
Efficiency: N/A
Efficacy: 89.6 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Indirect

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°	163.0	9.7
100°-110°	351.6	20.9
110°-120°	327.8	19.5
120°-130°	265.5	15.8
130°-140°	213.2	12.7
140°-150°	160.8	9.5
150°-160°	113.2	6.7
160°-170°	66.7	4.0
170°-180°	21.7	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°	842.4	50.0
90°-150°	1481.8	88.0
90°-180°	1683.0	99.9
0°-180°	1684.3	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°	0	4	7	9	10	1
95°	15	44	400	182	106	16
105°	51	71	328	645	599	54
115°	91	110	263	567	667	90
125°	126	148	252	451	526	112
135°	148	178	250	378	436	115
145°	173	198	251	313	344	108
155°	197	212	245	277	289	91
165°	215	221	235	249	253	61
175°	224	224	226	228	227	21
180°	224	224	224	224	224	



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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	1.8	2.7	3.6	4.5	5.0	5.9	6.3	7.2	7.7
92.5°	6.8	8.1	12.7	19.4	28.9	45.2	75.9	127.4	183.5	180.3	145.5
95°	14.9	15.4	19.0	23.9	33.9	54.2	102.6	202.0	326.7	400.4	391.8
97.5°	23.0	23.5	26.2	31.2	40.2	55.1	88.6	164.9	299.6	432.5	489.4
100°	31.6	32.5	34.3	39.3	47.9	61.5	87.7	146.4	260.3	408.1	521.0
102.5°	41.1	41.6	42.9	48.4	56.0	69.1	91.7	138.7	230.5	365.1	502.0
105°	51.1	51.1	53.3	57.8	65.1	77.7	97.6	137.8	213.3	327.6	457.3
107.5°	60.6	61.5	63.7	67.3	75.0	86.3	105.7	141.0	204.3	299.6	414.8
110°	70.9	71.8	73.7	77.7	84.5	96.3	114.8	146.0	200.6	281.1	379.6



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	81.3	82.2	83.6	87.7	94.4	105.7	123.4	152.3	200.6	270.2	353.4
115°	91.3	92.2	93.5	97.6	104.4	115.7	132.4	158.6	202.0	263.0	335.7
117.5°	100.3	101.7	103.0	107.1	114.8	125.6	141.4	165.8	204.3	258.9	324.0
120°	109.4	110.7	112.5	116.6	124.3	135.6	151.4	173.1	207.9	256.2	314.5
122.5°	118.8	119.7	121.1	125.2	133.8	145.1	160.9	181.2	211.0	254.0	306.4
125°	126.5	127.4	129.7	133.8	142.3	154.1	169.0	188.4	214.6	252.2	299.1
127.5°	132.9	134.2	136.9	141.9	150.9	162.7	177.1	195.2	218.7	251.2	292.4
130°	138.7	140.1	143.7	149.6	159.1	170.8	184.8	202.0	222.3	250.3	285.6
132.5°	143.2	145.1	149.6	156.4	166.3	178.0	192.1	207.9	226.4	250.3	280.2
135°	148.2	150.0	155.4	162.7	172.2	184.4	198.4	213.3	230.0	250.3	276.1
137.5°	154.5	155.9	160.9	168.1	177.6	190.2	202.9	217.4	233.6	250.8	272.0
140°	160.0	161.3	166.7	174.0	182.6	194.8	207.9	221.4	235.9	251.2	269.3
142.5°	166.3	167.2	172.2	179.4	187.5	198.8	211.0	223.7	237.2	251.7	267.1
145°	172.6	173.5	178.0	184.4	192.5	202.9	214.6	225.9	238.1	251.2	264.8
147.5°	179.4	179.8	183.9	189.8	197.0	206.5	216.9	227.3	238.6	250.3	262.5
150°	185.3	186.2	189.3	195.2	201.5	209.2	219.2	228.7	238.6	249.0	259.8
152.5°	191.6	192.1	194.8	199.7	205.6	212.4	221.4	229.6	238.1	247.2	256.7
155°	197.0	197.0	199.7	204.3	208.8	215.1	222.8	230.0	237.2	244.9	253.1
157.5°	202.0	202.0	204.3	208.3	212.4	217.4	224.1	230.5	236.3	242.7	249.9
160°	207.0	206.5	208.3	211.5	215.1	219.2	225.0	230.5	235.0	240.4	245.8
162.5°	211.0	210.6	212.4	215.1	217.8	221.0	225.9	230.0	233.6	237.7	242.2
165°	215.1	214.2	215.5	217.8	219.6	222.3	225.9	229.6	232.3	235.0	238.6
167.5°	217.8	217.4	218.3	219.6	221.0	222.8	225.9	228.7	230.0	232.3	235.0
170°	220.5	220.1	220.5	221.4	222.3	223.7	225.9	227.7	228.7	230.0	231.8
172.5°	222.3	221.4	221.9	222.8	223.2	223.7	225.5	226.8	226.8	227.3	228.7
175°	223.7	222.8	223.2	223.7	223.7	223.7	225.0	225.9	225.5	225.5	225.9
177.5°	224.6	223.7	223.7	224.1	223.7	223.7	224.6	225.0	224.1	224.1	224.6
180°	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1



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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°	8.1	8.6	9.0	9.9	9.9	9.9	10.4	10.4
92.5°	98.1	70.5	52.4	43.8	36.6	35.2	34.3	33.4
95°	324.9	256.2	200.6	162.7	130.6	117.0	113.4	106.2
97.5°	465.9	411.2	355.2	301.0	273.8	250.3	238.1	232.7
100°	555.8	533.7	487.1	440.1	409.0	376.4	359.7	352.5
102.5°	586.1	608.7	592.4	564.4	530.5	509.7	491.2	486.2
105°	565.8	627.7	647.5	642.6	628.1	613.2	604.2	598.7
107.5°	524.2	606.0	653.9	673.8	677.8	675.6	671.0	666.5
110°	477.2	563.0	626.8	665.2	685.5	694.1	697.3	697.3



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CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	440.1	520.6	585.2	632.2	664.3	680.5	689.6	693.6
115°	410.3	480.4	542.3	591.5	626.8	648.5	661.1	667.0
117.5°	389.5	451.4	505.7	552.2	587.9	610.5	623.1	626.8
120°	373.3	427.5	477.2	517.0	550.4	572.1	584.3	587.9
122.5°	361.1	410.3	453.2	489.8	518.8	538.2	550.4	553.6
125°	349.3	395.4	434.7	467.2	492.6	511.1	521.0	525.5
127.5°	337.1	380.9	418.0	448.7	471.8	488.5	498.0	499.8
130°	325.8	365.6	400.8	430.2	452.8	467.7	476.7	479.4
132.5°	314.5	351.1	382.3	410.3	432.9	447.8	455.9	459.1
135°	305.0	336.2	365.1	390.9	410.8	425.7	433.8	436.5
137.5°	296.4	322.6	347.5	370.1	388.2	402.2	409.9	413.0
140°	289.7	310.9	331.7	350.7	367.4	379.1	385.9	388.2
142.5°	283.8	301.0	318.1	333.9	347.5	357.0	363.3	365.1
145°	278.8	292.8	306.8	319.0	329.9	337.6	342.5	344.3
147.5°	273.8	285.6	296.9	306.4	315.4	321.7	324.9	325.8
150°	269.8	279.7	288.3	296.4	303.2	308.6	310.4	310.9
152.5°	265.3	273.8	281.5	287.4	292.8	296.9	298.7	299.1
155°	260.7	268.0	274.3	279.3	283.8	286.9	288.3	288.8
157.5°	256.2	262.5	267.5	271.6	275.2	277.9	279.3	279.3
160°	251.7	256.2	260.7	263.9	267.1	269.3	270.2	269.8
162.5°	246.7	250.8	254.4	257.1	259.4	261.2	261.2	261.2
165°	242.2	245.4	248.1	250.3	252.2	253.1	253.1	253.1
167.5°	237.7	239.9	242.2	244.0	244.9	245.8	245.4	245.4
170°	234.1	235.4	236.8	237.7	238.6	239.0	239.0	238.6
172.5°	230.0	231.4	232.3	232.7	232.7	233.6	232.7	232.3
175°	227.3	227.3	228.2	228.2	228.2	228.7	227.7	227.3
177.5°	225.0	225.5	225.5	225.5	225.0	225.5	224.1	224.1
180°	224.1	224.1	224.1	224.1	224.1	224.1	224.1	224.1

(END OF REPORT)