

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: P334971

Luminaire Tested: **S125IP-S590U835-4F0-1E-UDD-4**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P334971
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-S590U835-4F0-1E-UDD-4
Description: DEFINE 5 INDIRECT LED LUMINAIRE, BATWING OPTIC
PENDANT MOUNT, 590 LUMENS PER FOOT
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

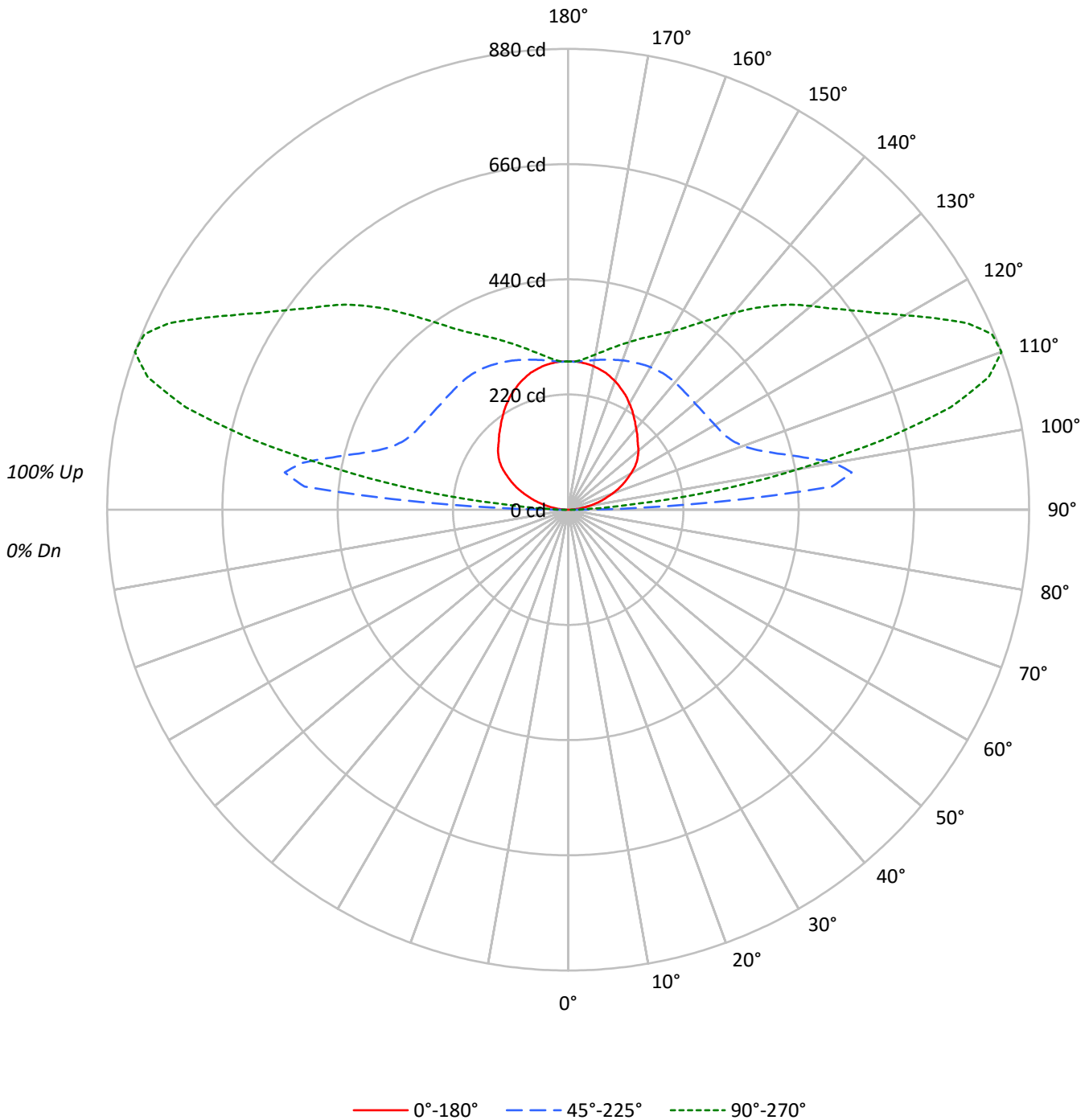
Lumens per Lamp: N/A
Luminaire Lumens: 2126.2 lumens
Efficiency: N/A
Efficacy: 113.1 lumens/watt
Spacing Criteria (0/90/45): - / - / -
Luminous Opening: Rectangular (W 0.42' x L: 4' x H: 0')
CIE Type: Indirect

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°	1.1	0.1
90°-100°	205.8	9.7
100°-110°	443.8	20.9
110°-120°	413.8	19.5
120°-130°	335.1	15.8
130°-140°	269.1	12.7
140°-150°	203.0	9.5
150°-160°	142.9	6.7
160°-170°	84.2	4.0
170°-180°	27.4	1.3
0°-30°	0.0	0.0
0°-40°	0.0	0.0
0°-60°	0.0	0.0
0°-90°	1.1	0.1
90°-120°	1063.4	50.0
90°-150°	1870.6	88.0
90°-180°	2125.0	99.9
0°-180°	2126.2	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	5	9	12	13	1
95°	19	56	505	229	134	20
105°	64	90	414	814	756	68
115°	115	139	332	716	842	113
125°	160	187	318	569	663	142
135°	187	225	316	477	551	145
145°	218	250	317	395	435	137
155°	249	268	309	349	364	115
165°	272	279	297	315	319	76
175°	282	282	285	288	287	27
180°	283	283	283	283	283	



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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	1.1	2.3	3.4	4.6	5.7	6.3	7.4	8.0	9.1	9.7
92.5°	8.6	10.3	16.0	24.5	36.5	57.0	95.8	160.9	231.6	227.6	183.7
95°	18.8	19.4	24.0	30.2	42.8	68.5	129.5	255.0	412.4	505.4	494.6
97.5°	29.1	29.7	33.1	39.4	50.8	69.6	111.8	208.2	378.2	545.9	617.8
100°	39.9	41.1	43.4	49.6	60.5	77.6	110.7	184.8	328.6	515.1	657.7
102.5°	51.9	52.5	54.2	61.0	70.7	87.3	115.8	175.1	290.9	460.9	633.7
105°	64.5	64.5	67.3	73.0	82.1	98.1	123.2	174.0	269.2	413.6	577.3
107.5°	76.4	77.6	80.4	85.0	94.7	109.0	133.5	178.0	257.8	378.2	523.7
110°	89.6	90.7	93.0	98.1	106.7	121.5	144.9	184.2	253.3	354.8	479.2



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CANDELA DISTRIBUTION (continued):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	50°
112.5°	102.7	103.8	105.5	110.7	119.2	133.5	155.7	192.2	253.3	341.1	446.1
115°	115.2	116.4	118.1	123.2	131.8	146.0	167.1	200.2	255.0	332.0	423.8
117.5°	126.6	128.3	130.1	135.2	144.9	158.6	178.5	209.3	257.8	326.9	409.0
120°	138.0	139.8	142.0	147.2	156.9	171.1	191.1	218.5	262.4	323.4	397.0
122.5°	150.0	151.2	152.9	158.0	168.8	183.1	203.1	228.7	266.4	320.6	386.8
125°	159.7	160.9	163.7	168.8	179.7	194.5	213.3	237.9	271.0	318.3	377.6
127.5°	167.7	169.4	172.8	179.1	190.5	205.4	223.6	246.4	276.1	317.2	369.1
130°	175.1	176.8	181.4	188.8	200.8	215.6	233.3	255.0	280.7	316.0	360.5
132.5°	180.8	183.1	188.8	197.4	209.9	224.7	242.4	262.4	285.8	316.0	353.7
135°	187.1	189.4	196.2	205.4	217.3	232.7	250.4	269.2	290.3	316.0	348.5
137.5°	195.1	196.8	203.1	212.2	224.2	240.2	256.1	274.4	294.9	316.6	343.4
140°	201.9	203.6	210.5	219.6	230.5	245.9	262.4	279.5	297.8	317.2	340.0
142.5°	209.9	211.1	217.3	226.5	236.7	251.0	266.4	282.4	299.5	317.7	337.1
145°	217.9	219.0	224.7	232.7	243.0	256.1	271.0	285.2	300.6	317.2	334.3
147.5°	226.5	227.0	232.2	239.6	248.7	260.7	273.8	286.9	301.2	316.0	331.4
150°	233.9	235.0	239.0	246.4	254.4	264.1	276.7	288.6	301.2	314.3	328.0
152.5°	241.9	242.4	245.9	252.1	259.5	268.1	279.5	289.8	300.6	312.0	324.0
155°	248.7	248.7	252.1	257.8	263.5	271.5	281.2	290.3	299.5	309.2	319.4
157.5°	255.0	255.0	257.8	263.0	268.1	274.4	282.9	290.9	298.3	306.3	315.4
160°	261.3	260.7	263.0	267.0	271.5	276.7	284.1	290.9	296.6	303.5	310.3
162.5°	266.4	265.8	268.1	271.5	274.9	278.9	285.2	290.3	294.9	300.0	305.7
165°	271.5	270.4	272.1	274.9	277.2	280.7	285.2	289.8	293.2	296.6	301.2
167.5°	274.9	274.4	275.5	277.2	278.9	281.2	285.2	288.6	290.3	293.2	296.6
170°	278.4	277.8	278.4	279.5	280.7	282.4	285.2	287.5	288.6	290.3	292.6
172.5°	280.7	279.5	280.1	281.2	281.8	282.4	284.6	286.4	286.4	286.9	288.6
175°	282.4	281.2	281.8	282.4	282.4	282.4	284.1	285.2	284.6	284.6	285.2
177.5°	283.5	282.4	282.4	282.9	282.4	282.4	283.5	284.1	282.9	282.9	283.5
180°	282.9	282.9	282.9	282.9	282.9	282.9	282.9	282.9	282.9	282.9	282.9



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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°	10.3	10.8	11.4	12.5	12.5	12.5	13.1	13.1
92.5°	123.8	89.0	66.2	55.3	46.2	44.5	43.4	42.2
95°	410.1	323.4	253.3	205.4	164.9	147.7	143.2	134.1
97.5°	588.1	519.1	448.4	379.9	345.7	316.0	300.6	293.8
100°	701.6	673.7	614.9	555.6	516.2	475.2	454.1	444.9
102.5°	739.8	768.4	747.8	712.5	669.7	643.4	620.1	613.8
105°	714.2	792.3	817.4	811.1	792.9	774.1	762.7	755.8
107.5°	661.7	764.9	825.4	850.5	855.6	852.8	847.1	841.4
110°	602.4	710.8	791.2	839.7	865.3	876.2	880.2	880.2



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CATALOG NUMBER: S125IP-S590U835-4F0-1E-UDD-4

CANDELA DISTRIBUTION (continued):

	55°	60°	65°	70°	75°	80°	85°	90°
112.5°	555.6	657.1	738.7	798.0	838.5	859.1	870.5	875.6
115°	517.9	606.4	684.5	746.7	791.2	818.6	834.5	842.0
117.5°	491.7	569.9	638.3	697.1	742.1	770.6	786.6	791.2
120°	471.2	539.6	602.4	652.6	694.8	722.2	737.6	742.1
122.5°	455.8	517.9	572.1	618.3	654.9	679.4	694.8	698.8
125°	440.9	499.1	548.8	589.8	621.8	645.2	657.7	663.4
127.5°	425.5	480.9	527.6	566.4	595.5	616.6	628.6	630.9
130°	411.3	461.5	506.0	543.0	571.6	590.4	601.8	605.2
132.5°	397.0	443.2	482.6	517.9	546.5	565.3	575.6	579.6
135°	385.0	424.4	460.9	493.4	518.5	537.3	547.6	551.0
137.5°	374.2	407.3	438.7	467.2	490.0	507.7	517.4	521.4
140°	365.6	392.5	418.7	442.7	463.8	478.6	487.1	490.0
142.5°	358.2	379.9	401.6	421.5	438.7	450.6	458.6	460.9
145°	352.0	369.6	387.3	402.7	416.4	426.1	432.4	434.7
147.5°	345.7	360.5	374.8	386.8	398.2	406.1	410.1	411.3
150°	340.5	353.1	363.9	374.2	382.8	389.6	391.9	392.5
152.5°	334.8	345.7	355.4	362.8	369.6	374.8	377.1	377.6
155°	329.1	338.3	346.2	352.5	358.2	362.2	363.9	364.5
157.5°	323.4	331.4	337.7	342.8	347.4	350.8	352.5	352.5
160°	317.7	323.4	329.1	333.1	337.1	340.0	341.1	340.5
162.5°	311.5	316.6	321.2	324.6	327.4	329.7	329.7	329.7
165°	305.7	309.7	313.2	316.0	318.3	319.4	319.4	319.4
167.5°	300.0	302.9	305.7	308.0	309.2	310.3	309.7	309.7
170°	295.5	297.2	298.9	300.0	301.2	301.8	301.8	301.2
172.5°	290.3	292.1	293.2	293.8	293.8	294.9	293.8	293.2
175°	286.9	286.9	288.1	288.1	288.1	288.6	287.5	286.9
177.5°	284.1	284.6	284.6	284.6	284.1	284.6	282.9	282.9
180°	282.9	282.9	282.9	282.9	282.9	282.9	282.9	282.9

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