

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: STREETWORKS

Report Number: P271298

Luminaire Tested: **XNV2-AF-02-LED-U-AFL-7027-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271298
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24160)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: XNV2-AF-02-LED-U-AFL-7027-1200
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 11775.8 lumens
Efficiency: N/A
Efficacy: 92.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B2 - U0 - G1

Input Watts (W): 128
Input Voltage (V): NR
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: 28.75 FT

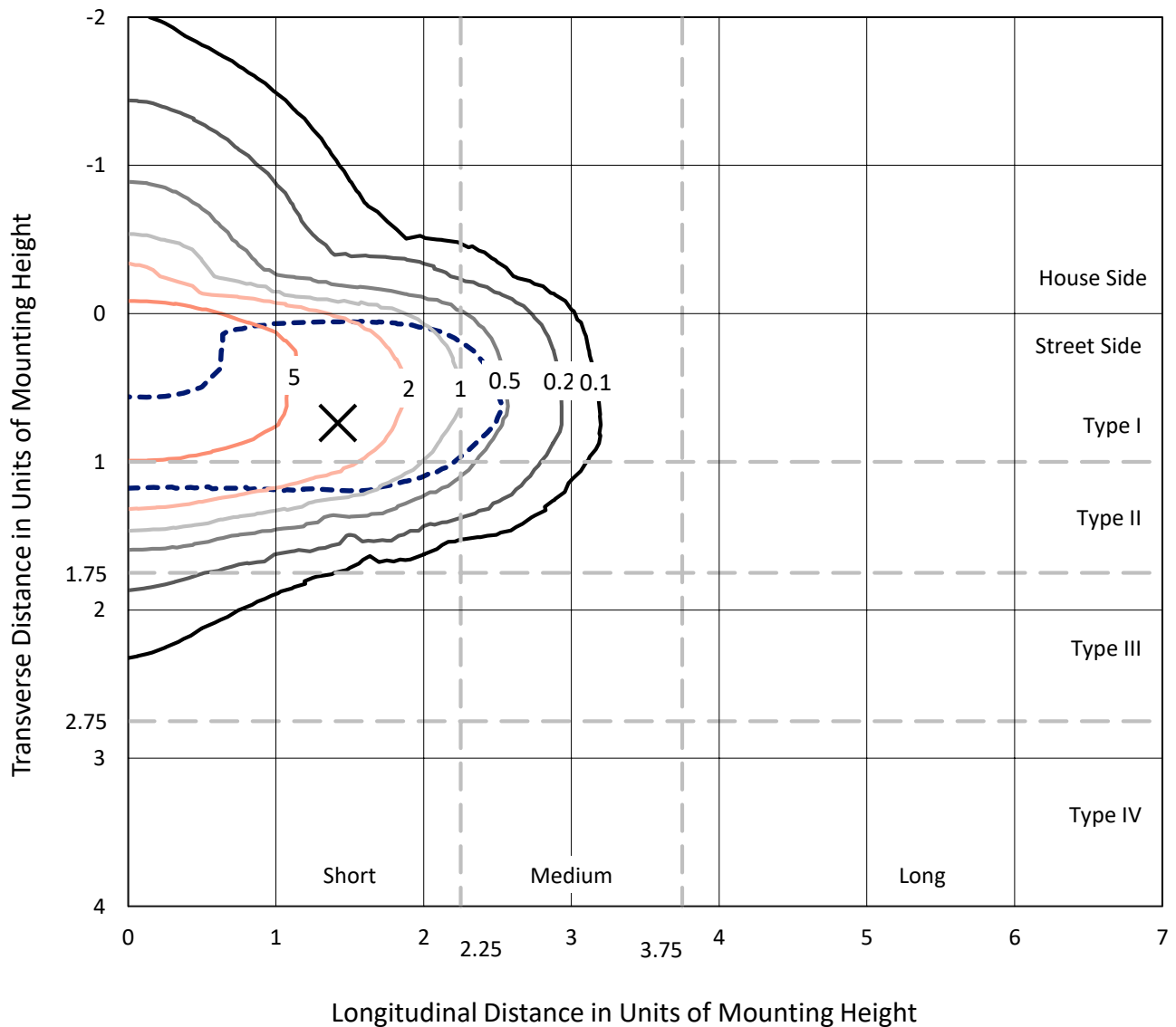


REPORT NUMBER: P271298

CATALOG NUMBER: XNV2-AF-02-LED-U-AFL-7027-1200

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

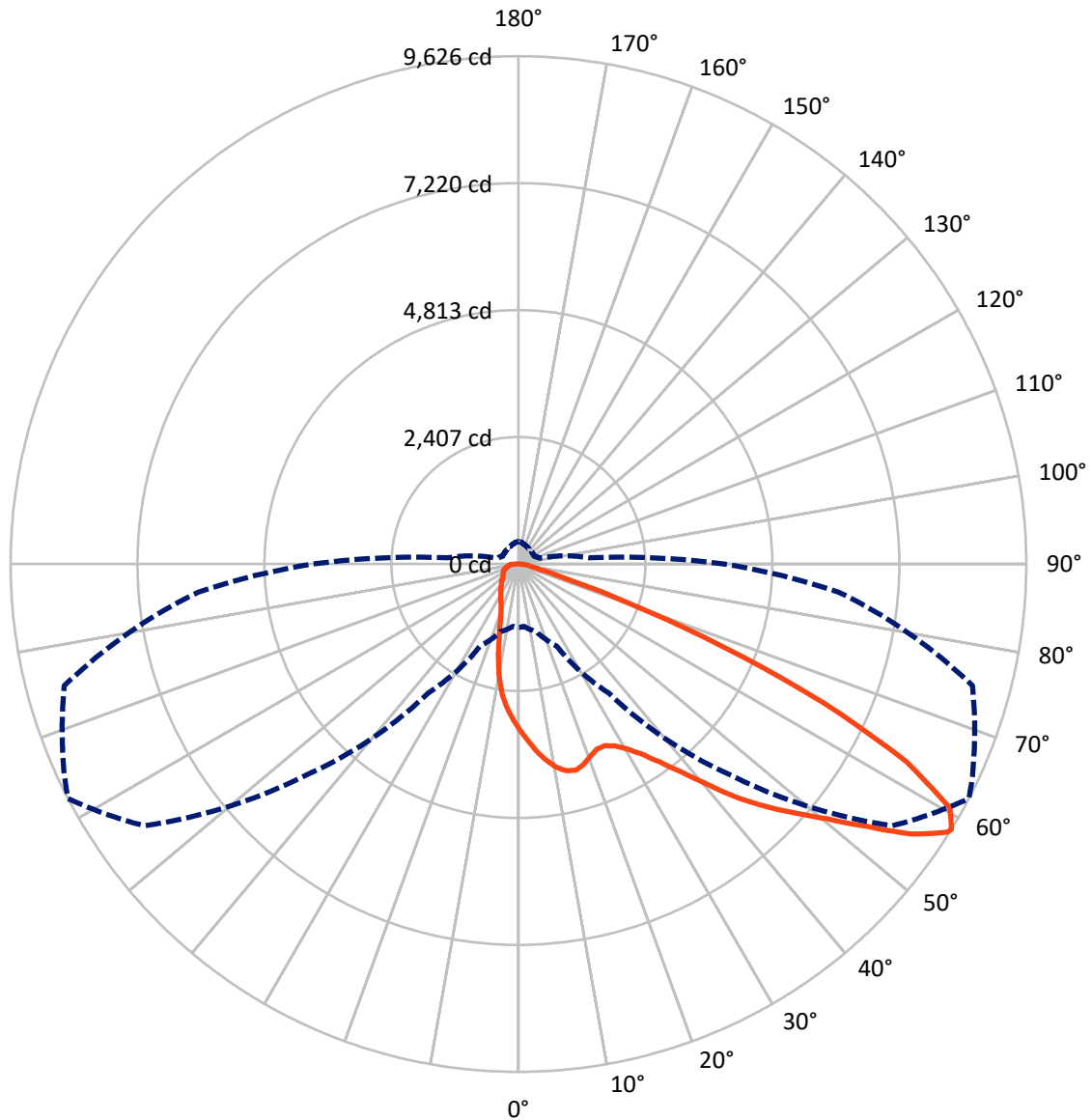


Based on 20 foot mounting height. Maximum calculated value = 9.2 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P271298

CATALOG NUMBER: XNV2-AF-02-LED-U-AFL-7027-1200

Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral - - - Horizontal Cone Through 58-Deg Vertical

REPORT NUMBER: P271298

CATALOG NUMBER: XNV2-AF-02-LED-U-AFL-7027-1200

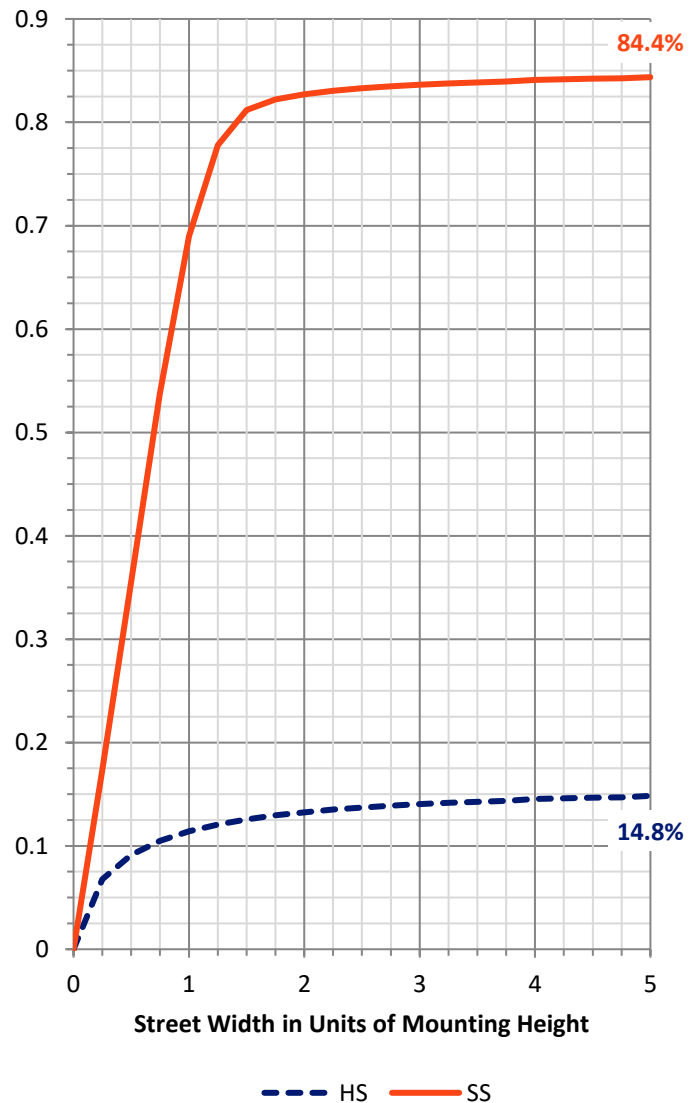
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1808.1	0.0	1808.1
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	9967.8	0.0	9967.8
	% Fixture	84.6	0.0	84.6
Total	Lumens	11775.8	0.0	11775.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	281.0	2.4
10°-20°	709.2	6.0
20°-30°	1149.4	9.8
30°-40°	1835.1	15.6
40°-50°	2669.3	22.7
50°-60°	2793.1	23.7
60°-70°	1702.8	14.5
70°-80°	476.2	4.0
80°-90°	159.6	1.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	11775.8	100.0
0°-180°	11775.8	100.0

Coefficient of Utilization



REPORT NUMBER: P271298

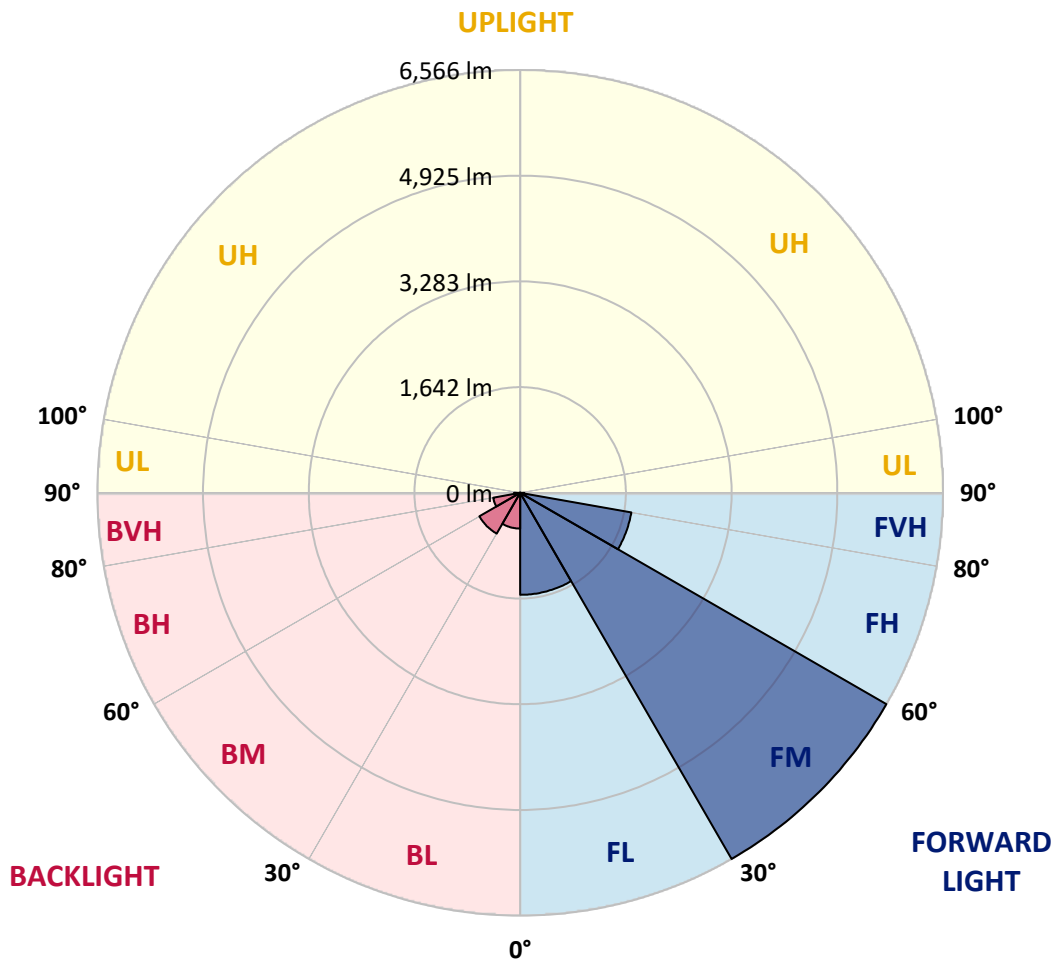
CATALOG NUMBER: XNV2-AF-02-LED-U-AFL-7027-1200

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1583.9	13.5			
FM	(30°-60°)	6566.3	55.8			
FH	(60°-80°)	1753.3	14.9			G1/1800
FVH	(80°-90°)	64.2	0.5			G1/100
BL	(0°-30°)	555.8	4.7	B2/1000		
BM	(30°-60°)	731.2	6.2	B1/1000		
BH	(60°-80°)	425.6	3.6	B1/500		G1/500
BVH	(80°-90°)	95.4	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G1

Type II Short





REPORT NUMBER: P271298

CATALOG NUMBER: XNV2-AF-02-LED-U-AFL-7027-1200

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	3144.1	3144.1	3144.1	3144.1	3144.1	3144.1	3144.1	3144.1	3144.1	3144.1	3144.1
2.5°	3568.7	3566.5	3536.4	3516.4	3492.9	3438.4	3383.9	3343.5	3322.9	3244.1	3167.7
5°	3863.8	3854.9	3838.1	3816.8	3785.8	3717.4	3631.3	3557.0	3527.6	3387.7	3247.2
7.5°	3707.8	3721.8	3774.0	3833.0	3894.7	3899.2	3838.1	3749.7	3717.4	3530.5	3324.4
10°	3275.8	3269.9	3335.3	3450.2	3654.0	3855.7	3956.6	3913.1	3879.3	3665.9	3401.6
12.5°	3144.7	3143.3	3154.4	3183.9	3312.0	3588.5	3926.4	4020.6	4008.9	3809.4	3484.0
15°	3184.5	3186.0	3185.3	3189.0	3224.2	3356.0	3757.9	4056.7	4093.4	3951.5	3568.0
17.5°	3312.0	3306.8	3290.5	3272.9	3278.1	3325.2	3576.2	3994.9	4105.3	4078.0	3638.7
20°	3508.4	3508.4	3464.9	3415.6	3383.2	3393.5	3500.2	3888.9	4050.7	4185.5	3691.7
22.5°	3754.9	3758.6	3694.5	3604.8	3531.1	3503.2	3543.8	3810.2	3984.5	4284.8	3738.7
25°	4061.1	4060.3	3966.8	3838.1	3721.8	3654.8	3654.0	3813.8	3964.0	4401.1	3788.1
27.5°	4440.1	4405.5	4296.7	4113.2	3949.2	3846.9	3800.5	3906.5	4007.3	4543.8	3854.3
30°	4867.7	4832.4	4689.6	4454.1	4231.8	4082.4	4005.9	4066.9	4139.7	4725.7	3954.3
32.5°	5290.8	5299.0	5131.2	4865.5	4580.0	4369.4	4256.1	4293.7	4344.5	4948.0	4089.9
35°	5910.6	5909.8	5690.6	5358.6	5019.3	4727.9	4584.4	4604.3	4650.5	5261.5	4279.6
37.5°	6372.8	6365.4	6224.0	5930.4	5548.6	5198.9	4991.3	4994.2	5034.0	5655.2	4530.0
40°	6419.8	6418.4	6417.6	6375.7	6114.5	5784.7	5524.9	5471.1	5487.3	6073.3	4795.6
42.5°	6060.0	6113.8	6268.3	6505.3	6578.1	6405.2	6159.3	6039.3	6004.0	6553.0	5076.7
45°	5547.0	5574.3	5845.1	6378.0	6811.4	6988.1	6803.4	6550.1	6489.7	7019.6	5305.6
47.5°	5308.5	5296.8	5453.5	6034.3	6788.6	7451.7	7464.9	7049.9	6947.5	7422.2	5500.6
50°	4797.0	4781.6	4979.6	5528.6	6539.8	7682.0	8144.3	7594.5	7405.4	7805.0	5677.3
52.5°	3777.7	3763.0	4028.7	4736.0	5983.4	7596.0	8716.9	8262.7	7940.4	8173.7	5842.1
55°	2458.1	2459.6	2712.8	3442.1	4842.0	7094.1	8985.4	9034.8	8673.5	8542.4	5975.3
57.5°	1353.4	1340.9	1521.3	1969.4	3331.1	5954.0	8761.7	9591.2	9402.7	8858.8	6071.7
58°	1203.3	1188.5	1327.7	1714.1	2986.5	5632.5	8649.2	9626.4	9496.3	8911.1	6085.7
60°	857.4	832.4	811.0	966.3	1720.8	4061.1	7898.4	9397.6	9523.4	9015.6	6072.5
62.5°	722.7	694.0	617.5	611.6	810.4	1986.4	6246.2	8253.2	8605.8	8775.0	5859.0
65°	671.3	642.5	541.7	505.7	549.8	857.4	3862.4	6372.8	6843.7	7938.2	5321.7
67.5°	634.5	600.5	492.5	445.3	454.2	513.0	1639.0	4167.7	4713.9	6190.2	4269.4
70°	601.2	563.7	453.4	398.8	391.5	390.0	640.3	2176.2	2702.6	4050.7	2859.9
72.5°	563.7	526.9	418.8	360.6	344.4	316.5	385.0	899.4	1232.7	1985.7	1310.7
75°	509.2	479.2	380.5	329.0	301.0	256.8	284.0	431.2	531.3	760.2	608.6
77.5°	448.3	423.9	341.4	302.5	264.9	209.8	217.1	292.2	328.2	428.3	352.6
80°	317.2	326.1	298.1	266.3	233.3	169.3	167.1	214.2	235.5	287.7	237.1
82.5°	218.6	225.2	242.9	210.6	188.5	131.7	122.9	148.7	159.7	173.7	114.9
85°	156.0	151.6	168.5	150.8	138.3	83.9	78.7	94.2	100.8	106.0	55.2
87.5°	95.0	94.2	97.1	78.1	72.1	42.7	38.9	44.8	47.8	46.4	26.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P271298

CATALOG NUMBER: XNV2-AF-02-LED-U-AFL-7027-1200

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3144.1	3144.1	3144.1	3144.1	3144.1	3144.1	3144.1	3144.1	3144.1	3144.1	3144.1
2.5°	3138.9	3102.8	3024.1	2960.9	2892.4	2840.1	2787.9	2758.4	2726.0	2707.6	2705.4
5°	3173.5	3100.0	2932.1	2776.1	2615.7	2471.3	2330.1	2225.6	2140.2	2091.7	2088.6
7.5°	3211.8	3096.2	2837.1	2567.0	2281.5	1997.4	1746.5	1569.1	1455.1	1402.1	1398.3
10°	3241.3	3080.7	2721.7	2301.4	1848.7	1473.4	1245.3	1140.8	1106.2	1097.3	1095.8
12.5°	3276.6	3069.8	2575.9	1960.6	1413.0	1121.7	1052.5	1045.7	1053.2	1057.6	1058.4
15°	3309.6	3048.4	2379.4	1583.1	1106.2	1002.4	1003.9	1017.9	1032.5	1039.2	1039.9
17.5°	3325.2	2996.1	2121.1	1247.4	967.8	948.7	965.6	984.1	997.3	1002.4	1002.4
20°	3325.2	2912.2	1821.6	1010.6	895.7	899.4	920.0	934.0	936.9	932.5	930.3
22.5°	3311.2	2808.6	1530.2	881.6	836.9	850.8	867.0	857.4	822.8	796.3	791.1
25°	3298.7	2685.6	1249.7	802.9	785.3	803.7	797.1	731.6	678.6	651.4	646.9
27.5°	3278.1	2537.0	1015.7	738.1	735.3	749.9	684.5	621.2	594.7	579.9	577.0
30°	3272.9	2375.7	850.1	680.7	685.9	665.4	590.2	569.6	563.7	555.6	552.0
32.5°	3289.9	2214.5	746.3	633.7	638.9	571.1	542.3	545.4	544.6	534.3	530.5
35°	3336.1	2057.7	680.0	590.9	576.3	511.6	515.2	524.0	524.0	511.6	507.2
37.5°	3417.2	1912.0	638.1	555.0	504.2	480.7	490.1	502.0	502.0	493.1	489.4
40°	3503.2	1770.0	606.4	526.1	458.6	459.3	468.8	477.7	481.3	482.7	479.9
42.5°	3581.3	1622.8	572.6	495.3	438.0	443.0	447.4	454.2	469.5	479.9	478.3
45°	3626.8	1474.8	535.7	457.1	423.9	426.2	424.7	436.4	454.8	470.4	470.4
47.5°	3668.8	1353.4	505.7	418.8	409.9	409.9	405.6	417.4	434.2	452.7	454.2
50°	3708.6	1274.8	484.2	389.3	392.3	390.0	388.5	399.7	422.5	444.5	448.3
52.5°	3749.0	1248.3	465.1	367.9	373.9	370.9	372.3	387.9	413.6	436.4	440.1
55°	3805.7	1265.2	445.3	353.3	356.2	355.5	361.4	379.1	401.8	424.7	426.2
57.5°	3875.6	1326.9	428.3	342.3	339.3	343.7	353.3	370.2	392.3	419.5	421.8
58°	3889.7	1341.7	425.3	339.3	335.5	342.3	351.7	367.9	390.9	419.5	421.8
60°	3911.0	1393.9	418.0	333.5	323.1	334.9	346.7	362.8	387.9	423.2	427.7
62.5°	3807.9	1404.2	415.8	326.8	309.8	324.6	338.5	356.9	385.0	435.7	445.3
65°	3451.0	1298.2	400.4	315.8	298.7	316.5	331.1	352.6	393.7	473.2	477.7
67.5°	2770.3	1078.1	362.8	298.7	286.3	307.0	325.2	352.6	397.4	479.2	482.1
70°	1904.6	810.4	315.8	280.5	271.6	295.2	323.1	360.6	385.0	453.4	444.5
72.5°	995.1	563.7	276.7	259.0	254.0	284.9	344.4	352.6	370.2	423.2	414.4
75°	501.3	383.4	243.6	234.7	234.1	281.1	385.6	339.3	354.7	398.2	417.4
77.5°	295.8	300.3	217.1	212.0	215.7	274.5	386.5	326.1	337.0	366.5	387.1
80°	202.4	248.0	196.5	195.0	197.9	252.5	356.2	309.8	316.5	346.7	368.8
82.5°	114.1	136.9	172.2	181.7	180.3	206.8	307.6	281.9	290.0	409.9	433.5
85°	55.2	82.5	144.3	170.0	153.8	137.6	250.3	250.3	252.5	293.7	297.2
87.5°	20.7	36.8	97.1	134.7	107.4	82.5	170.0	177.3	197.3	203.1	207.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)