

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: P198783

Luminaire Tested: **XNV2-AF-02-LED-U-T3R**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198783
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24250)
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-T3R
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12546.5 lumens
Efficiency: N/A
Efficacy: 113.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium - Full Cutoff
BUG Rating: B2 - U0 - G2

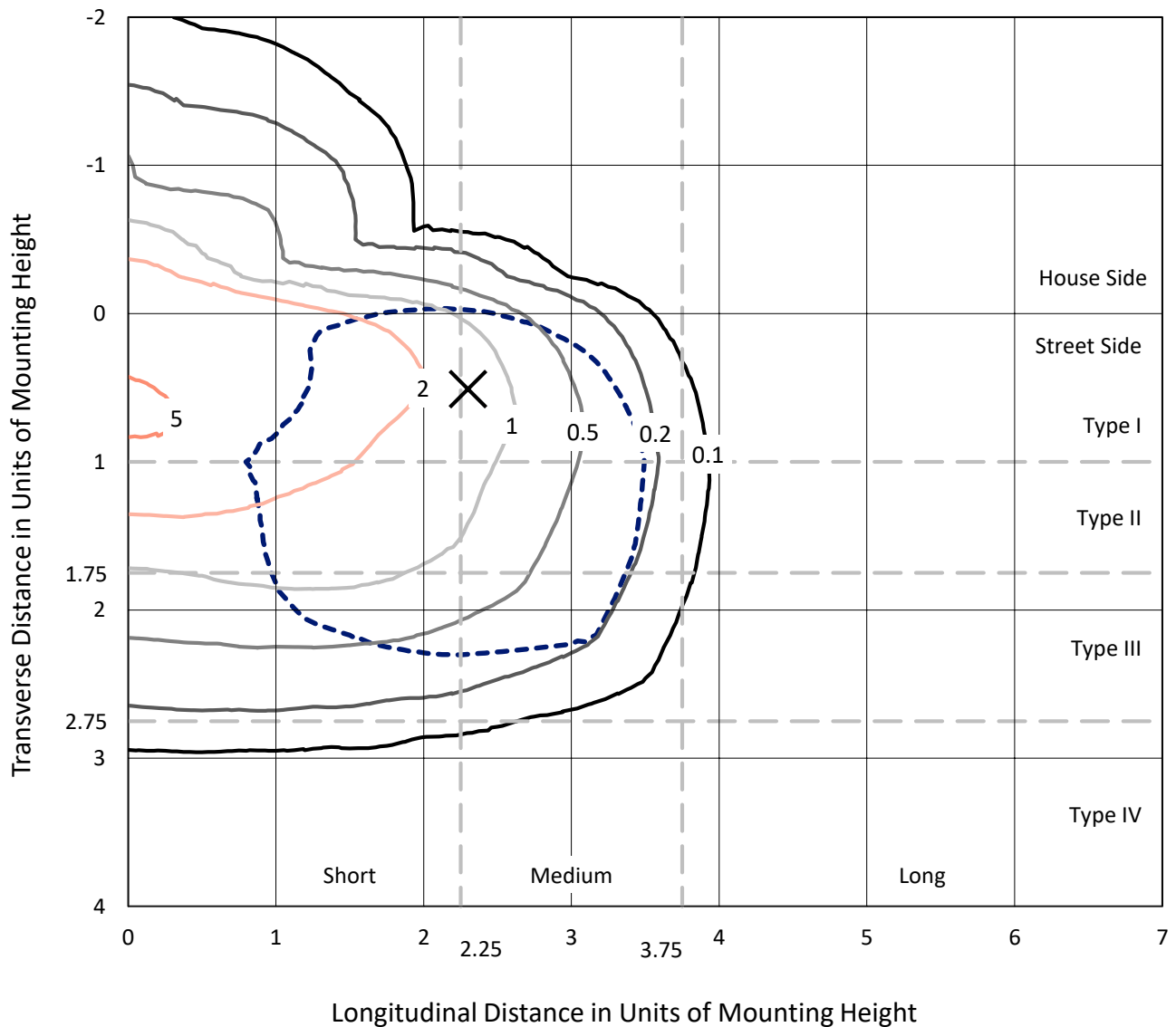
Input Watts (W): 111
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P198783
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Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

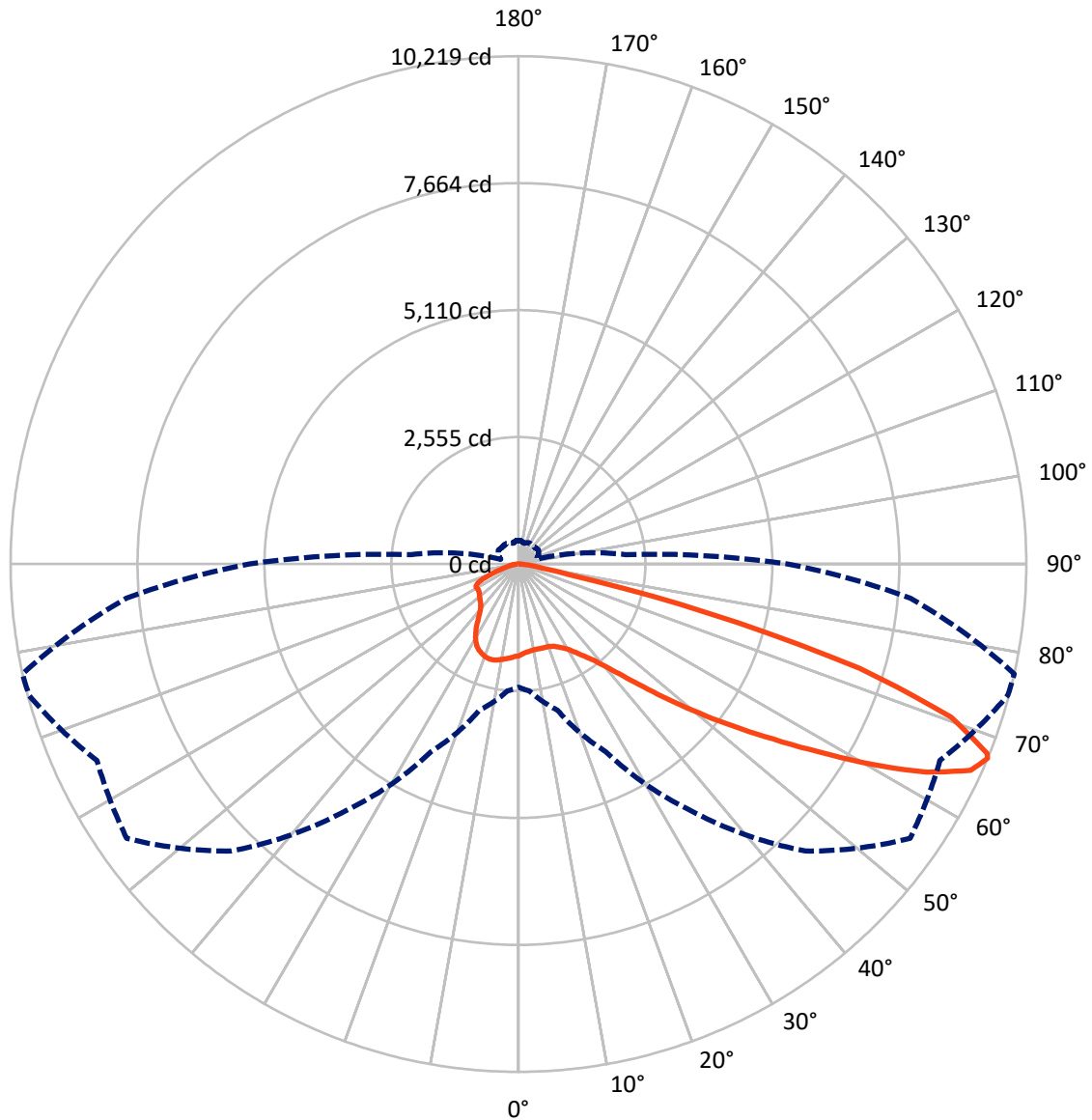


Based on 20 foot mounting height. Maximum calculated value = 5.5 fc
 Type III - Medium - Full Cutoff

REPORT NUMBER: P198783

CATALOG NUMBER: XNV2-AF-02-LED-U-T3R

Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	2156.1	0.0	2156.1
	% Fixture	17.2	0.0	17.2
Street Side	Lumens	10390.4	0.0	10390.4
	% Fixture	82.8	0.0	82.8
Total	Lumens	12546.5	0.0	12546.5
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	164.5	1.3
10°-20°	455.4	3.6
20°-30°	773.8	6.2
30°-40°	1238.0	9.9
40°-50°	1905.9	15.2
50°-60°	2644.2	21.1
60°-70°	3527.2	28.1
70°-80°	1678.6	13.4
80°-90°	158.9	1.3
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°	12546.5	100.0
0°-180°	12546.5	100.0



REPORT NUMBER: P198783

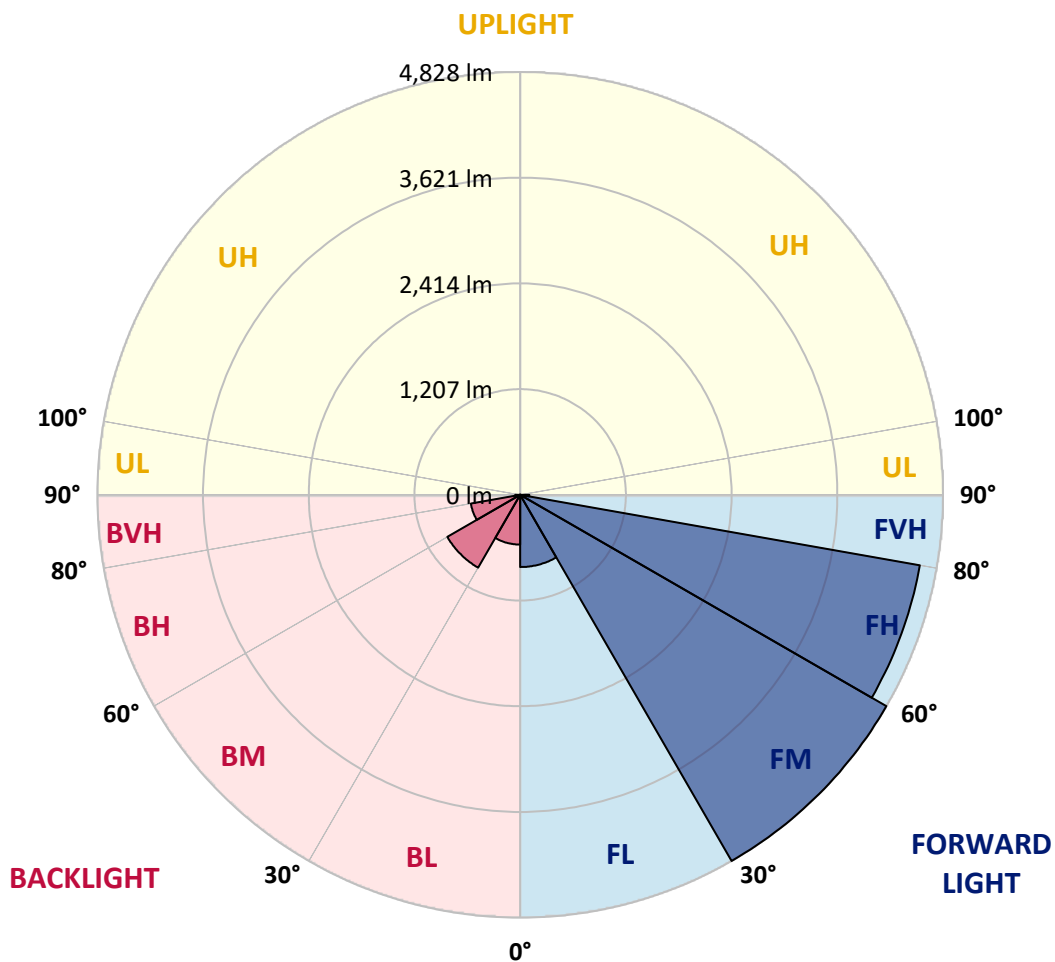
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	825.1	6.6			
FM	(30°-60°)	4828.0	38.5			
FH	(60°-80°)	4634.1	36.9			G2/5000
FVH	(80°-90°)	103.2	0.8			G2/225
BL	(0°-30°)	568.7	4.5	B2/1000		
BM	(30°-60°)	960.0	7.7	B1/1000		
BH	(60°-80°)	571.7	4.6	B2/1000		G2/1000
BVH	(80°-90°)	55.7	0.4			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2

Type III Medium





REPORT NUMBER: P198783

CATALOG NUMBER: XNV2-AF-02-LED-U-T3R

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77.5°	85°
0°	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5
2.5°	1655.7	1663.5	1664.2	1686.7	1696.9	1722.4	1750.4	1775.1	1796.9	1804.6	1818.6
5°	1489.8	1489.8	1492.1	1506.8	1535.6	1576.7	1634.8	1698.4	1765.1	1781.4	1822.5
7.5°	1402.9	1404.5	1406.0	1420.8	1443.3	1479.7	1537.9	1624.8	1735.6	1762.7	1834.9
10°	1410.6	1408.3	1400.6	1397.5	1406.8	1430.1	1480.5	1569.6	1710.8	1752.7	1857.4
12.5°	1532.4	1527.8	1502.2	1465.0	1430.8	1422.3	1457.2	1541.7	1699.1	1752.7	1895.3
15°	1741.1	1744.1	1693.7	1616.2	1527.0	1466.5	1461.9	1531.7	1695.3	1757.3	1939.6
17.5°	2012.5	2014.0	1944.2	1831.8	1683.7	1558.8	1493.6	1531.7	1695.3	1762.0	1982.3
20°	2300.9	2290.1	2211.0	2069.8	1877.5	1686.7	1551.8	1541.0	1699.9	1769.0	2022.6
22.5°	2548.4	2538.2	2455.3	2307.2	2086.9	1837.9	1630.2	1572.0	1725.5	1797.6	2079.1
25°	2764.7	2771.0	2690.3	2523.5	2295.5	2008.6	1747.2	1643.4	1779.0	1849.6	2149.0
27.5°	3027.6	3016.0	2923.0	2763.9	2510.3	2185.4	1893.8	1733.3	1842.6	1912.4	2234.2
30°	3331.6	3326.2	3200.6	3036.9	2746.9	2383.2	2038.8	1830.3	1925.6	1998.5	2341.3
32.5°	3700.8	3700.0	3565.1	3364.2	3012.9	2606.5	2210.2	1962.8	2046.6	2120.3	2483.2
35°	4118.8	4118.0	3978.5	3713.2	3319.3	2853.9	2411.9	2124.2	2196.3	2273.8	2652.3
37.5°	4408.8	4404.2	4331.3	4073.8	3658.2	3141.6	2663.9	2341.3	2366.1	2452.9	2856.3
40°	4464.7	4492.6	4555.4	4403.4	4028.1	3461.2	2916.7	2574.8	2598.0	2709.7	3112.9
42.5°	4404.2	4440.6	4649.2	4691.9	4398.0	3848.1	3233.1	2898.1	2927.6	3066.4	3414.6
45°	4351.4	4383.2	4644.6	4851.7	4763.3	4270.0	3627.9	3292.9	3348.7	3520.9	3758.9
47.5°	4261.5	4291.0	4553.1	4880.4	4971.8	4676.4	4103.3	3767.5	3863.7	4072.3	4151.3
50°	4256.8	4270.0	4428.3	4784.1	5044.0	4985.0	4629.9	4322.8	4470.1	4710.5	4585.7
52.5°	4139.0	4231.2	4374.8	4630.6	5045.5	5165.0	5148.7	4931.5	5158.7	5424.8	5061.9
55°	3417.7	3524.0	4196.3	4555.4	5036.2	5319.3	5622.5	5579.1	5934.2	6214.2	5595.3
57.5°	3191.3	3236.2	3681.4	4577.9	5113.7	5574.5	6096.4	6274.8	6821.4	7127.0	6235.2
60°	3129.2	3176.6	3578.3	4588.8	5323.9	6039.0	6739.3	7060.3	7864.5	8188.7	6961.9
62.5°	3060.2	3121.4	3586.1	4598.9	5693.1	6726.1	7592.3	7912.6	8935.6	9224.8	7642.8
65°	2858.5	2940.0	3442.5	4535.3	6097.1	7588.5	8719.9	8801.4	9820.4	10004.3	8053.8
67°	2476.3	2565.5	3048.6	4167.6	6060.0	8169.3	9621.9	9357.4	10196.6	10219.1	7920.4
67.5°	2355.2	2447.5	2915.2	4014.9	5953.7	8245.3	9781.7	9434.2	10193.4	10168.6	7796.3
70°	1586.0	1689.8	2064.4	2947.7	4775.6	7673.8	9742.9	9197.7	9524.9	9240.3	6698.2
72.5°	787.2	790.2	1029.9	1614.6	2893.4	5503.9	8127.4	7868.4	7721.1	7183.7	4915.3
75°	379.2	386.2	486.2	713.5	1219.9	2841.6	5542.7	5309.2	4520.5	3914.0	2460.0
77.5°	289.3	296.2	377.7	464.5	508.7	926.8	2745.3	2218.8	1309.9	1046.2	693.4
80°	223.3	236.5	318.8	356.7	336.6	371.4	863.2	679.3	509.5	467.6	343.5
82.5°	174.5	182.3	270.7	270.7	232.6	249.0	401.7	392.4	316.4	285.4	184.5
85°	123.3	138.8	217.9	201.6	152.7	154.4	240.4	230.4	162.9	131.0	72.1
87.5°	55.0	70.6	155.1	131.9	81.4	62.8	98.5	84.5	64.3	49.6	33.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5	1846.5
2.5°	1834.2	1846.5	1865.9	1877.5	1893.1	1899.2	1905.5	1916.3	1924.9	1922.5	1918.6
5°	1851.1	1872.1	1896.1	1903.9	1903.9	1896.1	1891.5	1892.3	1889.9	1888.4	1883.8
7.5°	1876.0	1904.6	1921.7	1913.9	1889.9	1859.7	1831.0	1813.9	1797.6	1787.6	1790.7
10°	1910.9	1942.7	1943.5	1909.3	1852.0	1786.1	1729.4	1693.0	1658.1	1642.6	1647.2
12.5°	1961.3	1993.1	1965.9	1892.3	1791.5	1688.3	1584.3	1509.2	1441.6	1425.4	1420.8
15°	2015.6	2040.4	1979.9	1855.8	1704.5	1534.7	1360.2	1247.8	1172.6	1159.4	1154.7
17.5°	2062.9	2076.8	1973.0	1790.7	1567.4	1299.8	1096.6	1020.6	1005.0	1012.8	1012.8
20°	2104.7	2100.1	1942.7	1689.8	1350.9	1039.2	921.3	920.6	941.5	960.9	962.4
22.5°	2157.5	2121.1	1894.6	1540.2	1092.7	867.1	846.9	867.1	890.3	912.1	914.3
25°	2220.3	2144.3	1830.3	1326.9	878.7	787.2	795.7	812.7	827.5	844.5	845.4
27.5°	2283.1	2162.1	1739.5	1076.5	762.3	736.0	745.3	752.3	756.2	767.0	767.0
30°	2356.1	2176.1	1608.4	862.3	708.8	691.0	685.6	682.4	685.6	700.3	701.0
32.5°	2447.5	2200.9	1429.3	739.8	684.0	659.2	631.3	615.7	626.7	652.9	657.7
35°	2551.4	2230.4	1214.4	691.0	675.5	643.6	592.5	568.5	572.3	596.4	600.3
37.5°	2681.8	2268.4	1002.8	679.3	684.0	642.1	574.7	540.5	523.4	524.3	523.4
40°	2848.5	2306.4	835.2	682.4	702.7	646.0	566.1	512.6	476.9	478.5	481.6
42.5°	3023.0	2331.2	729.0	691.7	725.1	651.4	563.0	485.5	454.5	480.8	504.8
45°	3226.9	2324.2	673.9	700.3	742.2	653.8	551.4	482.4	456.7	535.9	580.8
47.5°	3461.2	2294.0	642.9	704.2	746.9	652.9	542.9	492.4	476.2	613.5	664.6
50°	3715.6	2246.7	618.1	698.0	744.5	649.9	552.2	504.8	484.0	630.5	670.0
52.5°	3993.9	2203.2	592.5	684.0	732.8	640.6	563.9	499.4	462.2	580.8	611.1
55°	4323.5	2193.2	563.9	660.0	713.5	630.5	557.6	482.4	438.1	515.0	533.6
57.5°	4700.5	2256.0	526.6	630.5	687.1	610.3	542.9	473.1	429.6	468.4	478.5
60°	5178.9	2394.8	487.0	599.4	654.6	580.1	529.7	475.4	432.0	461.5	463.8
62.5°	5552.7	2519.6	451.3	561.5	611.1	543.6	515.8	477.7	438.9	470.8	466.9
65°	5688.4	2458.4	407.1	504.8	549.8	503.3	496.3	479.3	438.9	476.2	467.6
67°	5410.1	2166.0	365.3	448.3	491.6	467.6	477.7	473.1	431.2	475.4	460.6
67.5°	5277.4	2062.9	354.5	438.9	476.2	456.7	473.1	469.9	428.8	473.8	456.7
70°	4352.2	1479.7	299.3	368.4	398.6	402.5	444.4	449.8	410.2	445.2	414.1
72.5°	3096.7	926.0	258.3	285.4	321.8	344.3	405.6	422.7	385.4	387.0	361.4
75°	1532.4	497.2	230.4	220.2	250.5	286.9	353.6	385.4	349.0	322.6	314.0
77.5°	517.3	281.5	194.7	177.6	194.7	230.4	293.2	336.6	307.9	273.0	267.6
80°	267.6	204.7	152.0	142.7	153.5	178.4	229.6	280.0	262.9	264.4	217.9
82.5°	166.7	124.9	109.4	108.5	116.3	136.5	169.1	227.2	225.7	193.1	140.3
85°	77.5	72.1	69.8	72.1	74.5	77.5	110.2	162.0	171.3	103.9	92.3
87.5°	32.5	31.8	27.9	30.3	33.3	32.5	44.2	69.0	96.2	65.2	59.7
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)