

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: P198777

Luminaire Tested: **XNV2-AF-02-LED-U-T3-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198777  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (p24135)  
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-T3-1200  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13535.7 lumens  
Efficiency: N/A  
Efficacy: 105.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type III - Short - Semi-Cutoff  
BUG Rating: B2 - U0 - G2

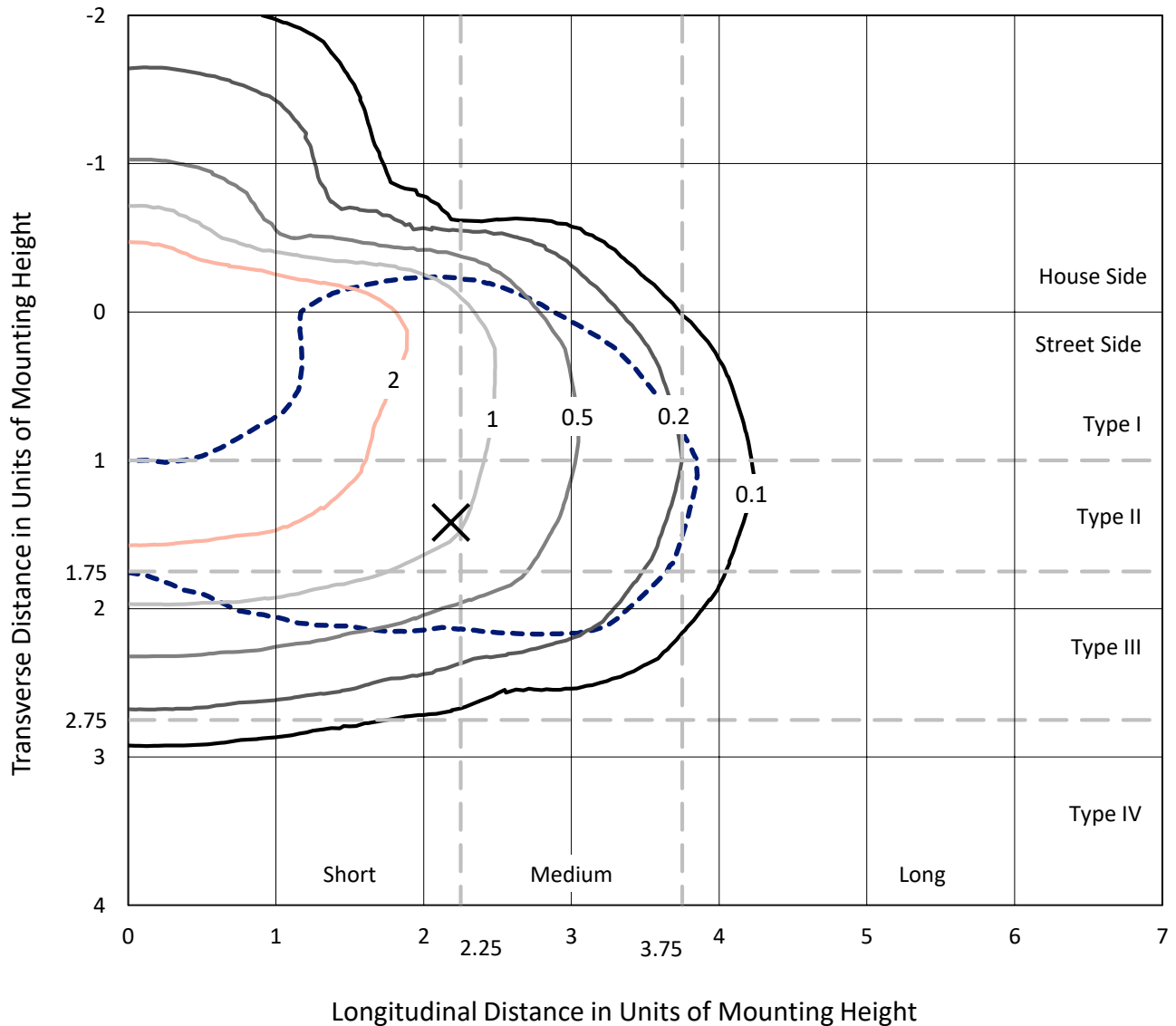
Input Watts (W): 128  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P198777  
 CATALOG NUMBER: XNV2-AF-02-LED-U-T3-1200

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

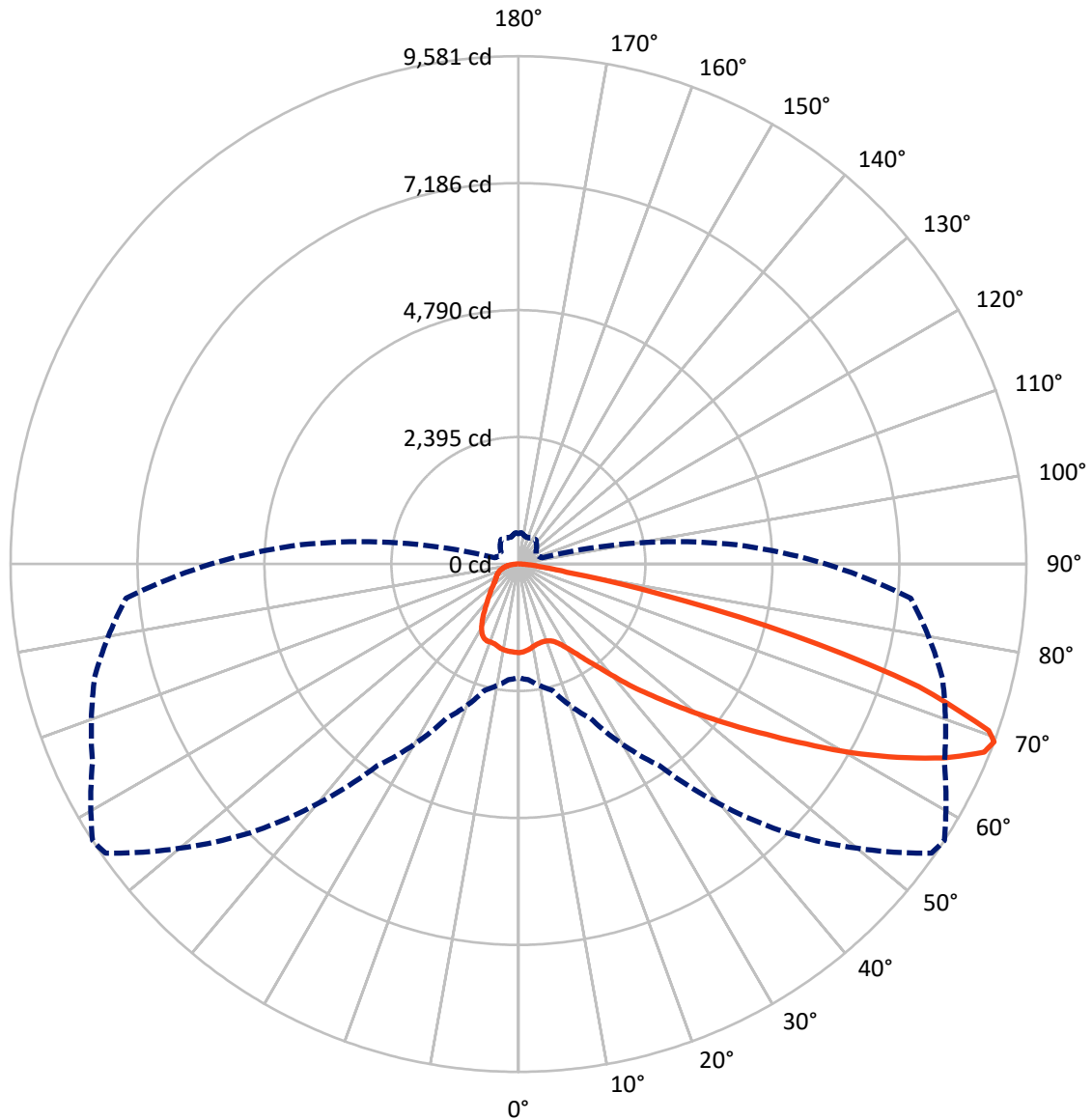


Based on 20 foot mounting height. Maximum calculated value = 4.3 fc  
 Type III - Short - Semi-Cutoff

REPORT NUMBER: P198777

CATALOG NUMBER: XNV2-AF-02-LED-U-T3-1200

### Luminous Intensity Polar Plot



— Vertical Plane Through 57-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

REPORT NUMBER: P198777

CATALOG NUMBER: XNV2-AF-02-LED-U-T3-1200

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2986.8	0.0	2986.8
	% Fixture	22.1	0.0	22.1
<b>Street Side</b>	Lumens	10548.8	0.0	10548.8
	% Fixture	77.9	0.0	77.9
<b>Total</b>	Lumens	13535.7	0.0	13535.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	156.6	1.2
10°-20°	445.2	3.3
20°-30°	740.6	5.5
30°-40°	1209.3	8.9
40°-50°	2041.0	15.1
50°-60°	3174.9	23.5
60°-70°	3782.0	27.9
70°-80°	1761.9	13.0
80°-90°	224.1	1.7
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°	13535.7	100.0
0°-180°	13535.7	100.0

**Coefficient of Utilization**



REPORT NUMBER: P198777

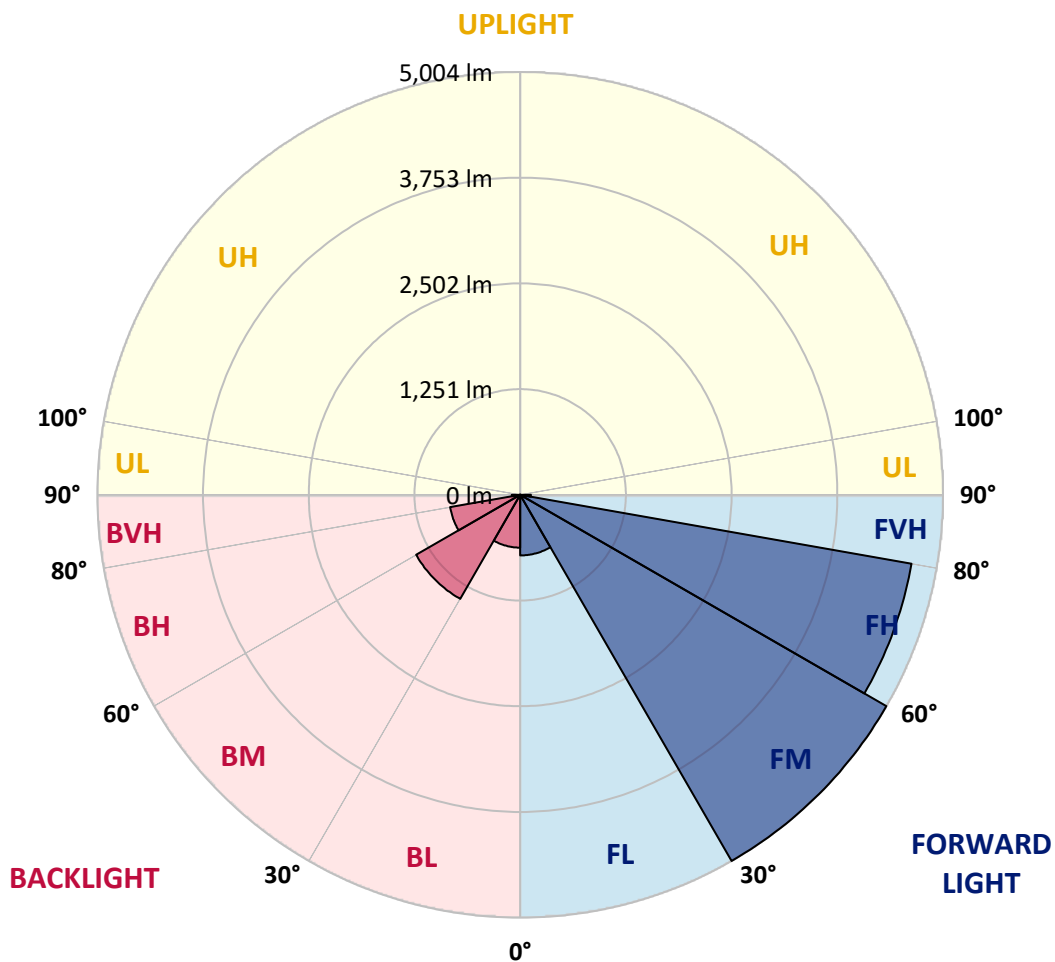
CATALOG NUMBER: XNV2-AF-02-LED-U-T3-1200

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	716.8	5.3			
FM	(30°-60°)	5003.7	37.0			
FH	(60°-80°)	4702.3	34.7			G2/5000
FVH	(80°-90°)	126.0	0.9			G2/225
BL	(0°-30°)	625.5	4.6	B2/1000		
BM	(30°-60°)	1421.6	10.5	B2/2500		
BH	(60°-80°)	841.7	6.2	B2/1000		G2/1000
BVH	(80°-90°)	98.1	0.7			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 Short





REPORT NUMBER: P198777

CATALOG NUMBER: XNV2-AF-02-LED-U-T3-1200

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	57°	65°	75°	85°
0°	1672.4	1672.4	1672.4	1672.4	1672.4	1672.4	1672.4	1672.4	1672.4	1672.4	1672.4
2.5°	1662.9	1662.9	1667.3	1667.3	1667.3	1665.6	1660.4	1662.1	1658.6	1656.0	1651.7
5°	1629.2	1630.9	1636.1	1637.8	1640.4	1641.2	1641.2	1640.4	1641.2	1641.2	1638.7
7.5°	1582.3	1584.0	1590.2	1593.7	1601.4	1608.4	1611.8	1611.8	1616.2	1619.6	1620.5
10°	1553.8	1553.8	1557.2	1557.2	1563.3	1566.8	1578.0	1577.2	1589.3	1600.5	1605.7
12.5°	1550.3	1550.3	1548.5	1542.5	1539.0	1538.1	1549.5	1551.1	1569.3	1589.3	1598.8
15°	1561.5	1561.5	1556.3	1544.2	1531.3	1525.1	1536.4	1539.8	1559.8	1583.2	1598.0
17.5°	1598.0	1597.0	1585.8	1561.5	1539.0	1529.5	1533.0	1536.4	1554.6	1581.5	1599.7
20°	1678.6	1678.6	1654.3	1610.0	1571.0	1548.5	1543.3	1546.0	1559.0	1584.0	1607.5
22.5°	1819.8	1822.4	1779.0	1706.3	1639.6	1591.9	1571.0	1573.7	1579.7	1604.0	1630.0
25°	2027.8	2020.8	1959.3	1856.1	1752.2	1670.7	1628.2	1630.9	1630.9	1653.4	1680.3
27.5°	2247.8	2249.6	2161.2	2050.3	1913.3	1792.0	1724.5	1723.6	1722.8	1744.4	1773.0
30°	2496.6	2497.4	2395.1	2267.0	2110.0	1955.0	1853.6	1852.7	1844.9	1871.8	1909.0
32.5°	2768.7	2767.8	2649.0	2504.4	2330.2	2154.2	2022.6	2021.7	2015.6	2052.0	2097.0
35°	3070.2	3070.2	2952.3	2773.8	2585.8	2390.0	2237.5	2236.6	2240.1	2289.5	2331.9
37.5°	3433.3	3441.1	3299.0	3082.4	2876.9	2668.2	2490.5	2485.3	2459.3	2542.5	2612.7
40°	3812.0	3833.7	3686.4	3433.3	3211.5	2995.7	2799.8	2796.4	2773.8	2862.2	2975.8
42.5°	4221.9	4271.3	4107.6	3849.3	3607.5	3374.4	3177.7	3168.2	3081.5	3219.3	3396.9
45°	4759.2	4791.2	4553.8	4319.8	4091.9	3825.8	3591.9	3540.7	3454.1	3630.9	3861.4
47.5°	5124.9	5109.2	4961.1	4804.2	4657.8	4403.0	4043.4	3978.4	3872.7	4106.6	4360.5
50°	5351.9	5363.1	5280.0	5272.2	5264.4	5086.7	4552.9	4474.9	4352.8	4630.1	4926.4
52.5°	5501.8	5450.7	5465.4	5642.2	5856.2	5771.3	5129.2	5042.5	4916.9	5194.1	5528.6
55°	5439.4	5371.8	5507.9	5856.2	6359.7	6378.8	5761.8	5672.6	5565.1	5793.8	6253.1
57.5°	5181.1	5215.0	5429.9	5914.3	6703.7	6922.9	6488.8	6397.8	6186.4	6418.6	6941.1
60°	4818.1	4886.5	5215.0	5822.4	6944.6	7346.7	7286.9	7226.2	6862.3	7027.0	7663.8
62.5°	4428.1	4495.8	4899.5	5665.6	6836.3	7721.9	8070.3	8033.0	7608.4	7612.8	8122.3
65°	3851.9	3879.6	4292.1	5237.5	6535.6	8060.8	8854.6	8821.6	8321.6	8112.7	8250.5
67.5°	2909.1	2943.7	3282.5	4134.4	5620.5	7877.0	9481.0	9475.9	8750.5	8298.2	7945.5
69°	2148.2	2190.6	2467.2	3209.7	4647.4	7176.9	9510.5	9580.8	8866.6	8279.2	7429.9
70°	1572.0	1620.5	1876.1	2547.7	3870.9	6403.9	9258.3	9409.1	8822.4	8158.6	7027.8
72.5°	668.1	684.6	810.3	1149.9	1963.7	3861.4	7583.3	7900.5	7968.1	7310.3	5490.6
75°	418.6	423.7	473.1	590.1	873.5	1597.0	4910.8	5343.2	5949.0	5671.6	3676.0
77.5°	315.5	319.8	348.3	406.4	542.5	596.2	2278.2	2716.7	3407.3	3336.3	1829.3
80°	241.7	244.4	263.4	295.5	382.2	373.5	739.2	928.9	1422.0	1254.8	647.3
82.5°	189.8	190.7	207.1	213.2	266.9	251.3	370.9	413.4	574.5	477.5	316.3
85°	168.1	170.7	187.2	156.0	170.7	151.6	203.7	221.0	305.0	287.7	119.6
87.5°	85.8	90.1	156.8	133.5	85.8	71.9	89.3	96.2	123.9	134.3	58.1
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: P198777

CATALOG NUMBER: XNV2-AF-02-LED-U-T3-1200

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1672.4	1672.4	1672.4	1672.4	1672.4	1672.4	1672.4	1672.4	1672.4	1672.4	1672.4
2.5°	1652.6	1653.4	1656.0	1660.4	1667.3	1675.9	1686.3	1696.8	1702.8	1707.1	1705.4
5°	1638.7	1639.6	1644.7	1652.6	1661.2	1674.2	1691.6	1704.5	1714.1	1720.1	1719.3
7.5°	1621.4	1623.9	1634.4	1643.0	1655.1	1665.6	1679.4	1691.6	1701.1	1707.1	1706.3
10°	1608.4	1610.9	1623.9	1635.2	1645.6	1647.4	1644.7	1641.2	1640.4	1644.7	1643.0
12.5°	1602.2	1607.5	1619.6	1627.4	1623.1	1606.6	1587.5	1579.7	1577.2	1585.8	1586.7
15°	1604.0	1608.4	1618.7	1613.5	1590.2	1562.5	1552.0	1558.1	1563.3	1568.5	1569.3
17.5°	1608.4	1610.9	1613.5	1594.5	1561.5	1543.3	1539.8	1533.8	1518.3	1509.6	1508.6
20°	1616.2	1619.6	1615.2	1585.0	1555.5	1531.3	1489.6	1452.4	1416.8	1397.8	1390.0
22.5°	1643.0	1645.6	1632.6	1603.2	1558.1	1479.2	1395.2	1331.1	1276.4	1247.0	1235.7
25°	1695.8	1700.2	1682.0	1644.7	1526.9	1389.1	1270.4	1183.8	1115.2	1079.7	1070.2
27.5°	1788.6	1792.9	1773.0	1675.9	1454.1	1268.7	1124.8	1039.0	980.1	949.7	945.4
30°	1927.2	1933.3	1915.1	1675.1	1343.1	1115.2	982.6	932.4	898.7	877.8	877.0
32.5°	2119.7	2142.2	2067.6	1645.6	1206.3	960.1	875.2	857.8	841.5	827.6	827.6
35°	2363.9	2416.8	2218.4	1584.0	1055.5	854.5	815.4	798.9	778.2	763.4	761.7
37.5°	2656.0	2738.3	2325.9	1474.9	925.5	803.3	779.1	752.2	719.2	690.7	683.7
40°	3057.2	3076.3	2378.7	1297.2	828.4	775.6	745.2	711.5	669.8	637.8	634.3
42.5°	3460.2	3397.8	2368.3	1106.6	772.9	750.4	710.5	673.3	636.1	609.2	609.2
45°	3918.6	3678.5	2289.5	915.1	722.7	721.9	678.5	643.0	614.4	594.4	590.1
47.5°	4357.1	3930.7	2153.4	773.9	670.7	693.3	657.8	629.1	603.1	584.1	580.6
50°	4889.2	4222.7	2008.7	675.0	620.4	668.1	649.1	634.3	609.2	576.2	572.8
52.5°	5417.8	4564.2	1896.9	600.6	576.2	648.1	654.3	656.0	632.6	568.5	564.2
55°	5985.4	4929.0	1779.0	542.5	539.9	638.6	666.4	664.6	653.4	570.2	563.2
57.5°	6525.2	5295.6	1603.2	501.8	511.3	629.1	669.0	641.3	621.3	578.9	567.6
60°	6972.3	5598.8	1344.9	473.1	487.0	610.1	651.6	610.1	576.2	577.1	566.7
62.5°	7189.9	5683.8	1028.6	440.2	467.1	578.9	626.6	586.7	555.5	580.6	574.5
65°	7024.4	5442.0	733.1	409.9	442.8	542.5	611.8	566.7	545.0	597.9	591.0
67.5°	6429.9	4783.4	532.0	383.0	419.4	505.2	584.1	548.5	534.7	610.9	595.4
69°	5798.2	4130.1	461.0	367.4	402.9	485.3	565.9	539.0	526.8	592.7	570.2
70°	5273.0	3626.6	425.4	357.9	389.1	474.0	552.0	533.0	519.0	571.1	544.2
72.5°	3780.8	2344.1	357.9	329.3	352.7	448.9	521.7	510.5	489.6	515.6	498.3
75°	2284.2	1223.6	304.1	299.8	314.6	414.2	486.1	472.3	451.4	454.1	445.4
77.5°	1049.4	565.0	254.8	265.1	274.7	370.9	442.8	427.2	408.2	401.2	402.1
80°	460.1	330.2	213.2	226.2	231.4	333.6	396.0	378.7	357.9	395.2	366.5
82.5°	248.7	191.5	166.3	175.0	189.8	290.3	344.0	321.5	301.6	351.0	283.4
85°	100.6	97.9	112.6	121.3	131.8	208.9	287.7	264.3	240.1	214.9	209.7
87.5°	43.4	46.7	55.4	58.9	70.2	130.0	193.2	169.0	169.8	145.6	143.0
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)