

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: P198951

Luminaire Tested: **XNV2-AF-02-LED-U-T4FT-7050**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198951  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24256)  
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-T4FT-7050  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV FORWARD THROW OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 12154 lumens  
Efficiency: N/A  
Efficacy: 109.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B2 - U0 - G2

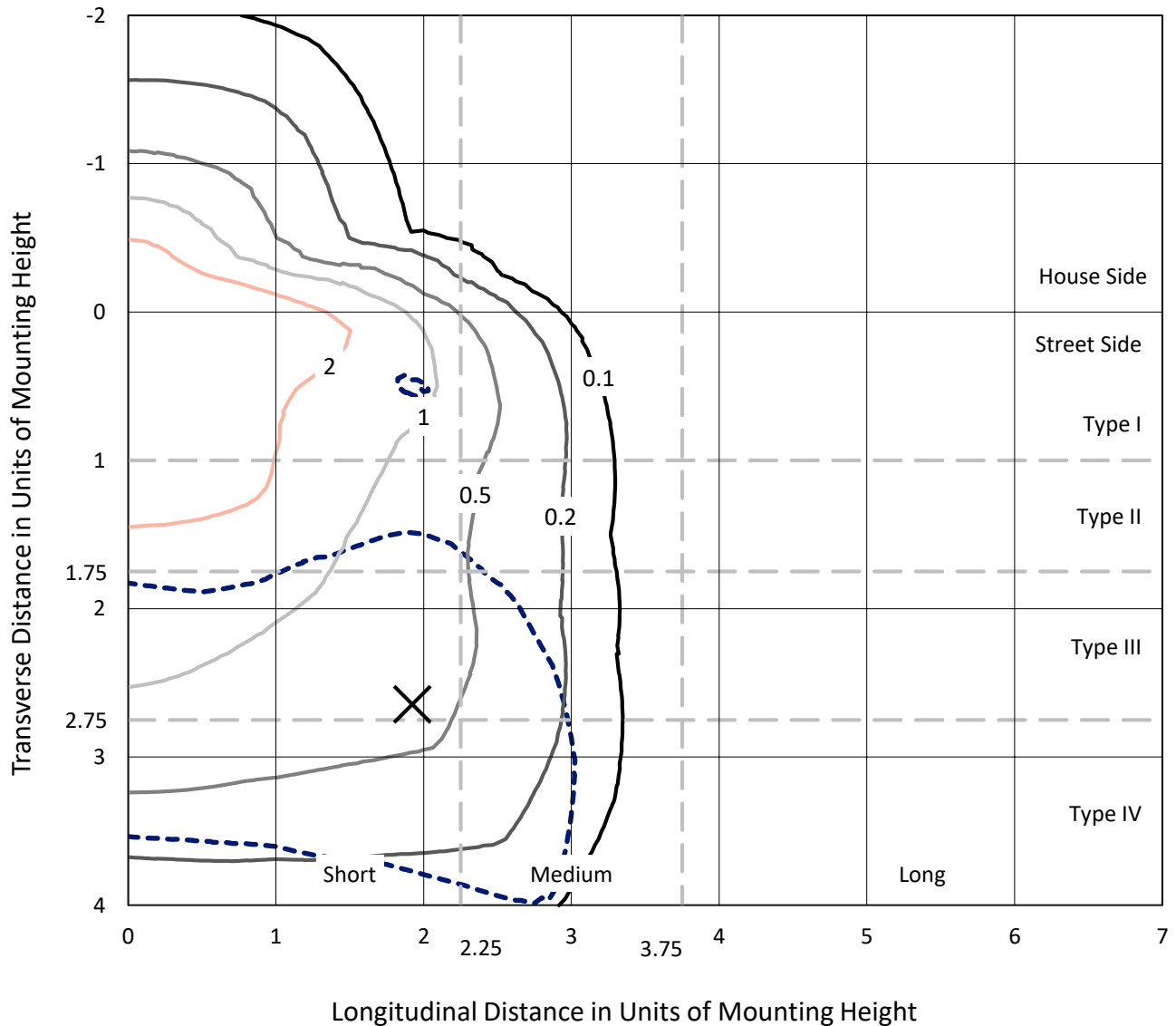
Input Watts (W): 111  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

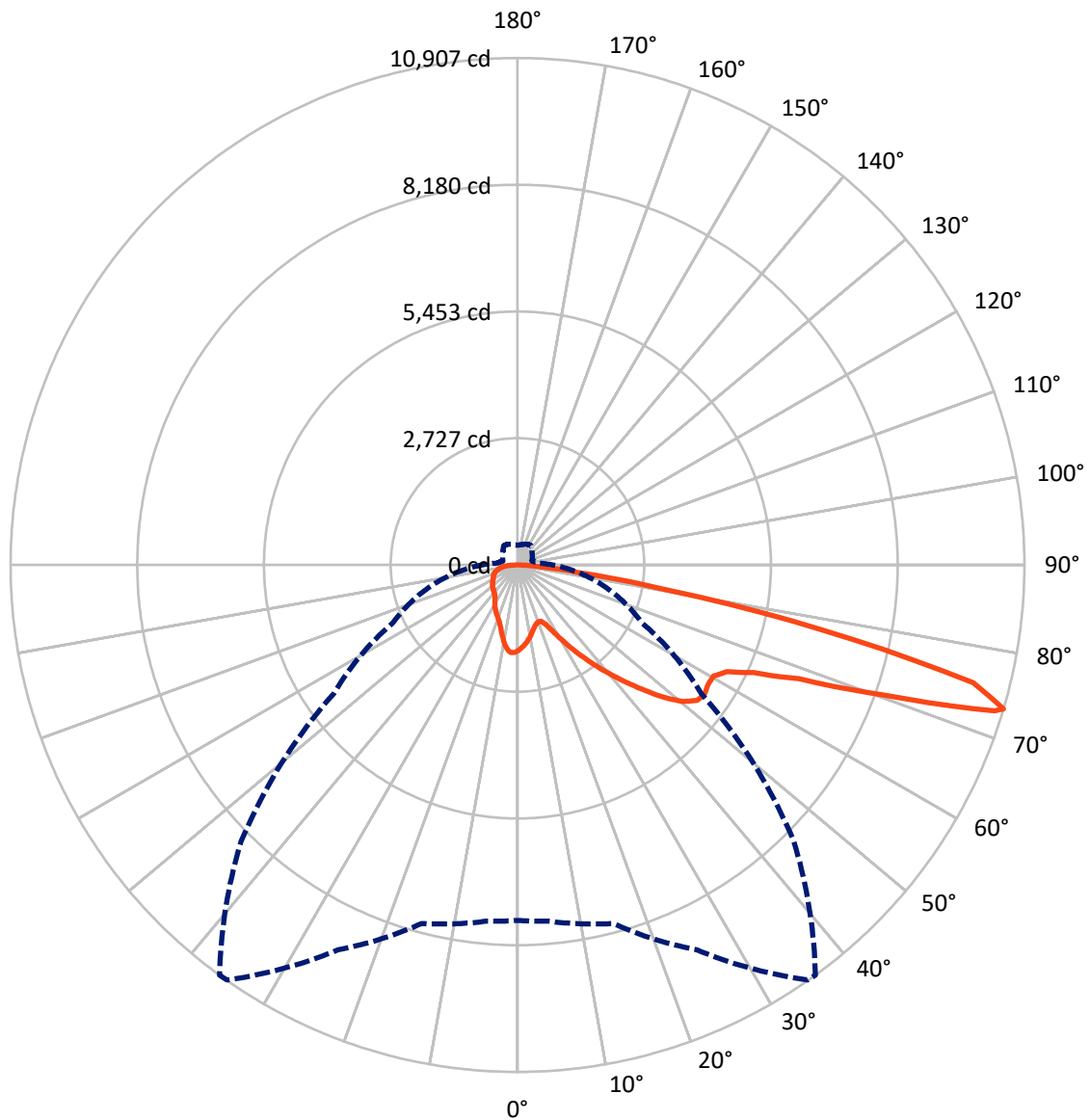


Based on 20 foot mounting height. Maximum calculated value = 4.6 fc  
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P198951

CATALOG NUMBER: XNV2-AF-02-LED-U-T4FT-7050

### Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral      - - - Horizontal Cone Through 73-Deg Vertical

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CATALOG NUMBER: XNV2-AF-02-LED-U-T4FT-7050

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2343.6	0.0	2343.6
	% Fixture	19.3	0.0	19.3
<b>Street Side</b>	Lumens	9810.3	0.0	9810.3
	% Fixture	80.7	0.0	80.7
<b>Total</b>	Lumens	12154.0	0.0	12154.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	167.2	1.4
10°-20°	420.0	3.5
20°-30°	673.3	5.5
30°-40°	1113.7	9.2
40°-50°	1723.3	14.2
50°-60°	2307.0	19.0
60°-70°	3013.7	24.8
70°-80°	2461.7	20.3
80°-90°	274.0	2.3
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°	12154.0	100.0
0°-180°	12154.0	100.0



REPORT NUMBER: P198951

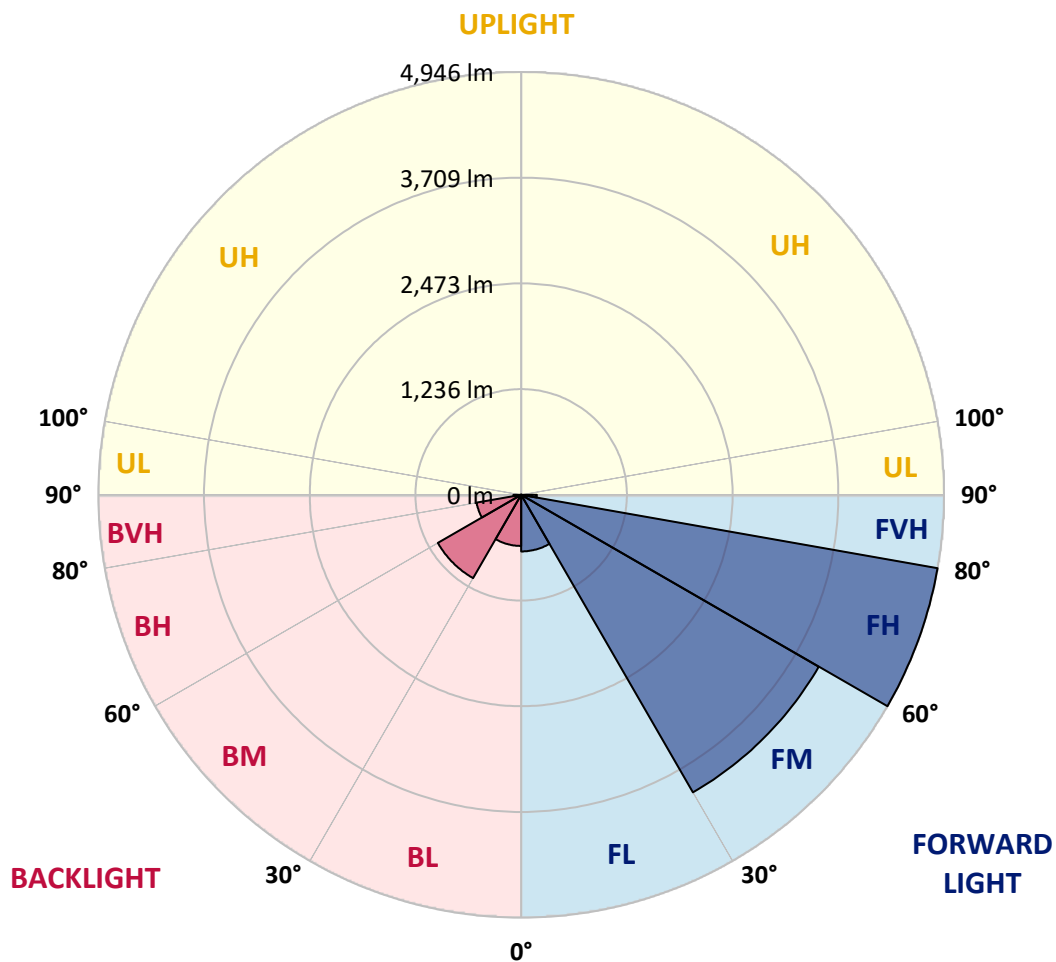
CATALOG NUMBER: XNV2-AF-02-LED-U-T4FT-7050

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

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	662.3	5.4			
FM	(30°-60°)	4018.5	33.1			
FH	(60°-80°)	4945.8	40.7			G2/5000
FVH	(80°-90°)	183.8	1.5			G2/225
BL	(0°-30°)	598.2	4.9	B2/1000		
BM	(30°-60°)	1125.5	9.3	B2/2500		
BH	(60°-80°)	529.6	4.4	B2/1000		G2/1000
BVH	(80°-90°)	90.2	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 IV Short





REPORT NUMBER: P198951

CATALOG NUMBER: XNV2-AF-02-LED-U-T4FT-7050

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	1841.0	1841.0	1841.0	1841.0	1841.0	1841.0	1841.0	1841.0	1841.0	1841.0	1841.0
2.5°	1770.7	1775.3	1776.1	1781.5	1781.5	1780.7	1783.1	1792.3	1797.0	1807.8	1817.0
5°	1683.4	1688.8	1691.2	1700.4	1712.0	1712.8	1721.3	1739.0	1756.0	1780.0	1800.0
7.5°	1585.4	1591.5	1597.7	1617.0	1634.0	1635.6	1651.8	1680.4	1702.7	1732.1	1768.4
10°	1490.4	1491.9	1498.1	1522.8	1545.2	1547.5	1570.7	1603.1	1633.2	1674.2	1715.1
12.5°	1412.4	1417.0	1415.5	1434.0	1453.3	1454.9	1485.8	1526.7	1570.7	1617.0	1665.7
15°	1385.4	1384.6	1368.4	1367.6	1376.1	1377.6	1407.8	1455.6	1505.1	1562.2	1624.8
17.5°	1403.9	1397.7	1355.2	1329.0	1323.6	1325.1	1347.5	1400.0	1452.5	1518.2	1593.1
20°	1505.8	1481.9	1382.3	1319.0	1301.2	1301.2	1314.3	1356.8	1414.7	1491.2	1585.4
22.5°	1747.5	1710.5	1498.1	1385.4	1322.8	1316.6	1306.6	1339.0	1403.1	1495.0	1617.0
25°	2051.8	2034.0	1710.5	1562.2	1433.2	1413.2	1346.8	1358.3	1427.1	1536.7	1703.5
27.5°	2333.7	2302.8	1989.2	1819.4	1637.1	1606.2	1465.7	1418.6	1484.2	1613.9	1828.6
30°	2498.1	2477.3	2275.7	2113.6	1896.6	1857.2	1655.6	1537.5	1586.1	1741.4	2006.2
32.5°	2677.3	2664.9	2563.0	2415.5	2177.7	2132.1	1901.2	1731.3	1742.1	1910.5	2220.1
35°	2851.0	2867.3	2809.3	2701.2	2480.4	2437.9	2230.9	1984.6	1934.4	2100.4	2448.7
37.5°	3059.5	3063.4	3027.1	2956.8	2798.5	2763.8	2593.1	2254.9	2143.7	2302.8	2669.6
40°	3475.8	3414.8	3272.7	3217.1	3122.9	3101.2	2906.6	2502.8	2338.3	2510.5	2878.1
42.5°	3926.0	3831.0	3608.6	3517.5	3479.6	3459.6	3167.7	2668.0	2520.5	2718.2	3082.7
45°	4288.9	4211.7	3993.9	3881.2	3885.8	3853.4	3395.5	2815.5	2718.2	2926.7	3311.3
47.5°	4646.5	4517.5	4273.5	4257.3	4311.3	4263.4	3613.2	2963.0	2924.4	3153.8	3539.9
50°	4669.6	4552.2	4453.4	4583.1	4675.8	4616.3	3810.9	3156.1	3138.3	3428.7	3834.9
52.5°	4387.8	4370.8	4521.4	4739.9	4893.6	4840.3	3972.3	3354.5	3356.8	3772.3	4193.9
55°	4285.1	4263.4	4444.1	4712.9	4920.6	4888.9	4092.8	3578.5	3599.3	4189.3	4579.3
57.5°	4458.0	4404.0	4439.5	4661.9	4857.3	4838.7	4217.9	3827.1	3865.0	4669.6	4935.3
60°	4994.7	4884.3	4695.9	4737.6	4859.6	4848.8	4397.0	4104.4	4167.7	5170.0	5160.8
62.5°	5798.6	5673.5	5289.7	5104.4	5077.4	5056.5	4692.8	4444.9	4476.6	5531.4	5029.5
65°	6680.5	6546.1	6089.7	5786.3	5627.2	5582.4	5170.0	4855.7	4657.3	5530.7	4518.3
67.5°	7670.5	7528.4	7073.6	6784.0	6611.8	6535.3	5944.6	5187.8	4598.6	5062.7	3615.5
70°	8684.4	8549.3	8340.8	8441.9	8517.6	8401.0	7164.7	5298.2	4176.9	3969.2	2427.9
72.5°	8146.2	8135.4	8293.7	9252.8	10711.5	10734.7	8383.2	4986.2	3227.1	2359.1	1294.2
73°	7646.5	7692.1	7985.5	9133.1	10899.1	10906.9	8407.2	4824.8	2963.0	2032.5	1136.7
75°	3961.5	4270.4	5359.2	7405.6	10092.2	10128.5	7411.0	3652.6	1766.1	1129.0	766.0
77.5°	1061.0	1047.1	1726.7	3607.8	6728.4	6680.5	4682.8	1768.4	846.4	708.1	537.5
80°	363.7	368.3	587.7	1319.7	3140.6	3252.6	2032.5	771.4	556.8	493.4	380.7
82.5°	185.3	191.5	307.3	561.4	1313.5	1285.7	654.1	454.1	373.0	299.6	213.1
85°	98.8	101.9	169.1	291.1	481.9	487.3	230.1	242.5	237.1	169.9	105.0
87.5°	48.6	50.2	81.1	128.2	178.4	172.2	80.3	105.0	116.6	95.8	57.9
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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CATALOG NUMBER: XNV2-AF-02-LED-U-T4FT-7050

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1841.0	1841.0	1841.0	1841.0	1841.0	1841.0	1841.0	1841.0	1841.0	1841.0	1841.0
2.5°	1828.6	1828.6	1838.7	1855.6	1868.0	1879.6	1887.3	1899.7	1906.6	1905.8	1905.1
5°	1816.3	1824.0	1844.1	1864.9	1878.8	1888.1	1888.1	1893.5	1893.5	1891.2	1888.1
7.5°	1787.7	1800.8	1830.2	1848.7	1852.6	1842.5	1822.4	1807.0	1787.7	1777.7	1773.8
10°	1742.1	1759.1	1796.2	1804.7	1784.6	1749.1	1700.4	1658.7	1621.7	1604.7	1599.3
12.5°	1697.3	1719.7	1754.5	1741.4	1693.5	1624.0	1549.1	1491.9	1450.2	1434.0	1428.6
15°	1660.3	1687.3	1714.3	1673.4	1590.0	1493.5	1410.8	1357.6	1325.9	1313.5	1310.5
17.5°	1635.6	1667.2	1676.5	1600.0	1484.2	1376.1	1302.7	1268.0	1254.1	1248.7	1247.1
20°	1637.1	1672.6	1650.2	1529.0	1382.3	1273.4	1224.7	1214.7	1214.7	1214.7	1213.9
22.5°	1679.6	1710.5	1639.4	1462.6	1284.2	1186.9	1166.1	1174.5	1180.7	1180.7	1180.0
25°	1767.6	1784.6	1647.1	1398.5	1192.3	1112.0	1112.8	1129.0	1134.4	1134.4	1132.8
27.5°	1902.0	1888.1	1661.0	1327.4	1102.0	1044.0	1054.9	1069.5	1073.4	1071.1	1070.3
30°	2070.3	2014.7	1672.6	1244.0	1017.0	980.7	990.0	998.5	995.4	990.0	989.2
32.5°	2258.7	2143.7	1665.7	1150.6	942.1	915.1	920.5	925.1	920.5	907.4	907.4
35°	2445.6	2260.3	1627.8	1048.7	882.6	851.8	851.0	865.7	864.9	849.4	850.2
37.5°	2609.3	2352.2	1554.5	955.2	831.7	805.4	808.5	817.8	822.4	801.6	799.2
40°	2752.2	2415.5	1451.0	875.7	790.8	792.3	783.8	769.1	763.7	754.5	752.9
42.5°	2886.6	2459.5	1341.3	809.3	769.9	787.7	759.1	724.3	709.7	718.2	723.6
45°	3018.6	2508.9	1235.6	754.5	743.6	773.8	734.4	695.8	678.8	682.6	688.0
47.5°	3180.0	2577.7	1108.1	695.8	703.5	748.3	718.9	677.2	651.8	636.3	631.7
50°	3392.4	2677.3	942.9	632.4	661.0	720.5	705.8	650.2	622.4	591.5	583.8
52.5°	3658.0	2771.5	776.1	581.5	626.3	696.5	684.2	627.0	593.1	556.0	549.8
55°	3922.9	2784.6	632.4	537.5	586.9	664.1	657.9	608.5	560.6	530.5	524.3
57.5°	4108.2	2660.3	535.9	500.4	549.0	624.0	634.0	586.1	533.6	510.4	506.6
60°	4111.3	2363.0	477.2	475.7	520.5	589.2	609.3	559.9	516.6	501.2	498.1
62.5°	3784.7	1904.3	439.4	457.2	499.6	560.6	590.7	545.2	512.8	506.6	503.5
65°	3172.3	1407.0	409.3	440.2	480.3	536.7	575.3	540.6	511.2	508.9	506.6
67.5°	2342.1	964.5	383.8	418.5	458.7	512.0	560.6	533.6	501.9	511.2	508.1
70°	1473.4	644.0	359.9	393.8	430.1	483.4	541.3	521.2	490.4	485.0	474.9
72.5°	831.7	465.6	331.3	362.2	393.1	445.6	515.1	500.4	464.1	442.5	432.4
73°	751.4	440.9	324.3	354.4	384.6	437.8	508.9	494.2	456.4	432.4	423.2
75°	549.8	360.6	292.7	322.8	349.0	402.3	479.5	463.3	422.4	393.8	387.7
77.5°	398.5	278.0	251.7	278.8	301.9	352.9	435.5	417.0	376.8	361.4	355.2
80°	287.3	210.8	208.5	234.8	254.8	306.6	388.4	369.1	330.5	376.1	366.0
82.5°	171.4	135.1	152.9	182.2	203.1	257.1	337.5	315.1	278.0	281.1	239.4
85°	81.9	76.4	95.0	119.7	134.4	176.1	281.1	263.3	222.4	182.2	178.4
87.5°	36.3	34.7	45.6	53.3	71.8	105.8	192.3	170.7	161.4	96.5	75.7
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)