

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: P271360

Luminaire Tested: **XNV2-AF-02-LED-U-T4W-7027-1200**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271360  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24127)  
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-T4W-7027-1200  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 11356.7 lumens  
Efficiency: N/A  
Efficacy: 88.7 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - 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

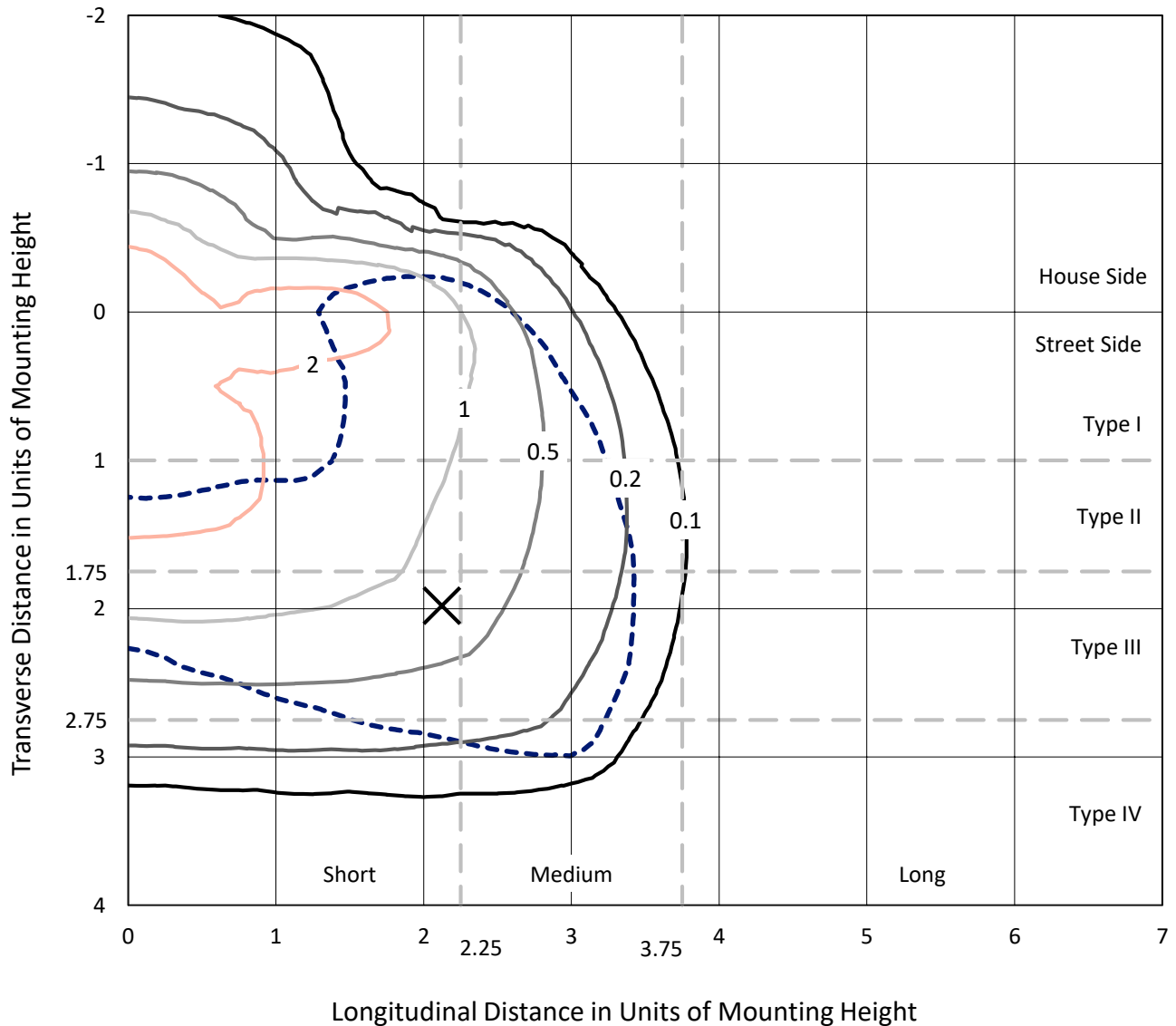


REPORT NUMBER: P271360

CATALOG NUMBER: XNV2-AF-02-LED-U-T4W-7027-1200

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

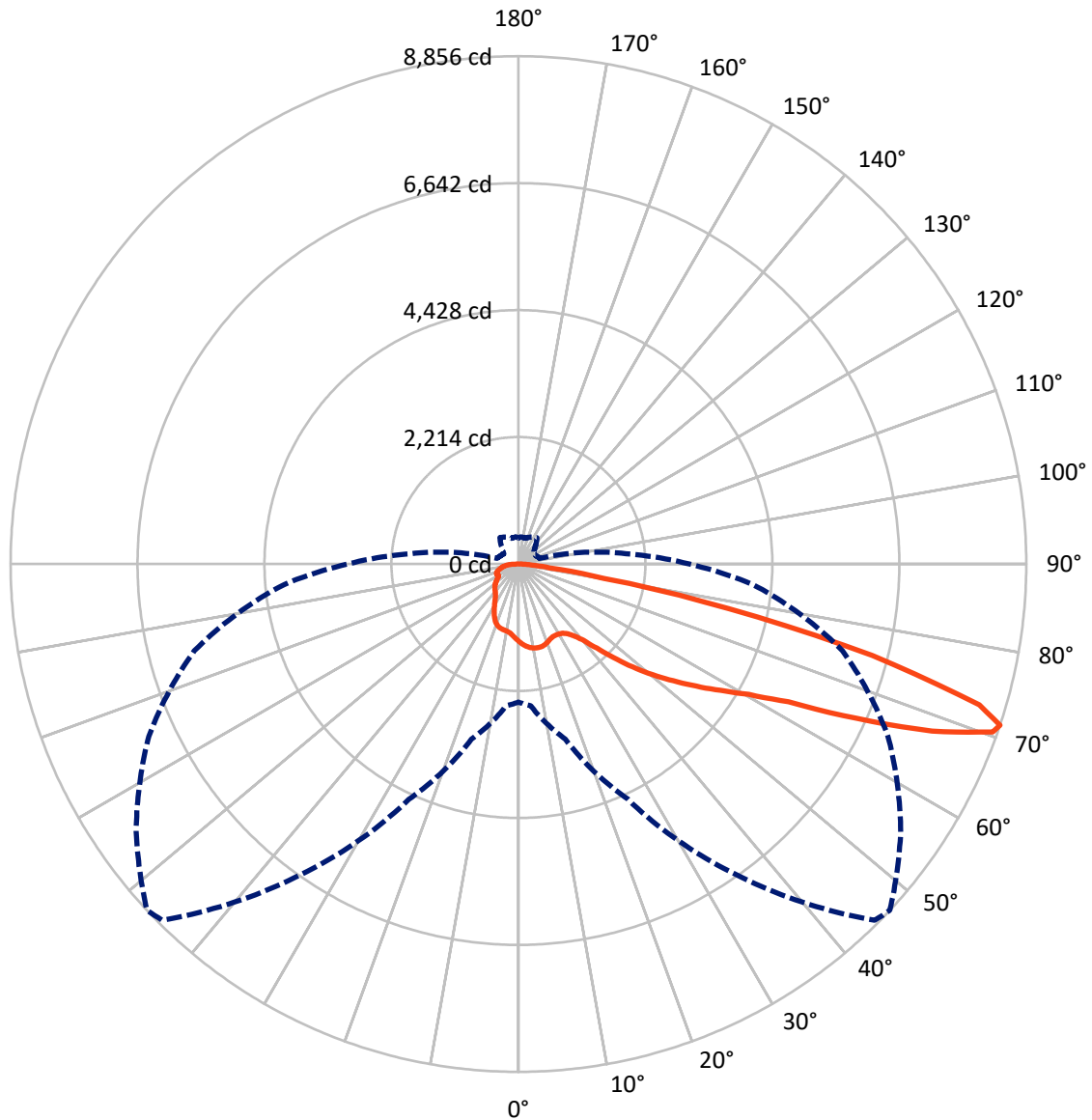


Based on 20 foot mounting height. Maximum calculated value = 3.9 fc  
 Type IV - Short - Semi-Cutoff

REPORT NUMBER: P271360

CATALOG NUMBER: XNV2-AF-02-LED-U-T4W-7027-1200

### Luminous Intensity Polar Plot



— Vertical Plane Through 47-Deg Lateral      - - - Horizontal Cone Through 71-Deg Vertical



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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	2433.9	0.0	2433.9
	% Fixture	21.4	0.0	21.4
<b>Street Side</b>	Lumens	8922.8	0.0	8922.8
	% Fixture	78.6	0.0	78.6
<b>Total</b>	Lumens	11356.7	0.0	11356.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	128.9	1.1
10°-20°	377.2	3.3
20°-30°	560.6	4.9
30°-40°	804.9	7.1
40°-50°	1427.1	12.6
50°-60°	2442.0	21.5
60°-70°	3466.7	30.5
70°-80°	1898.7	16.7
80°-90°	250.6	2.2
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°	11356.7	100.0
0°-180°	11356.7	100.0

**Coefficient of Utilization**



REPORT NUMBER: P271360

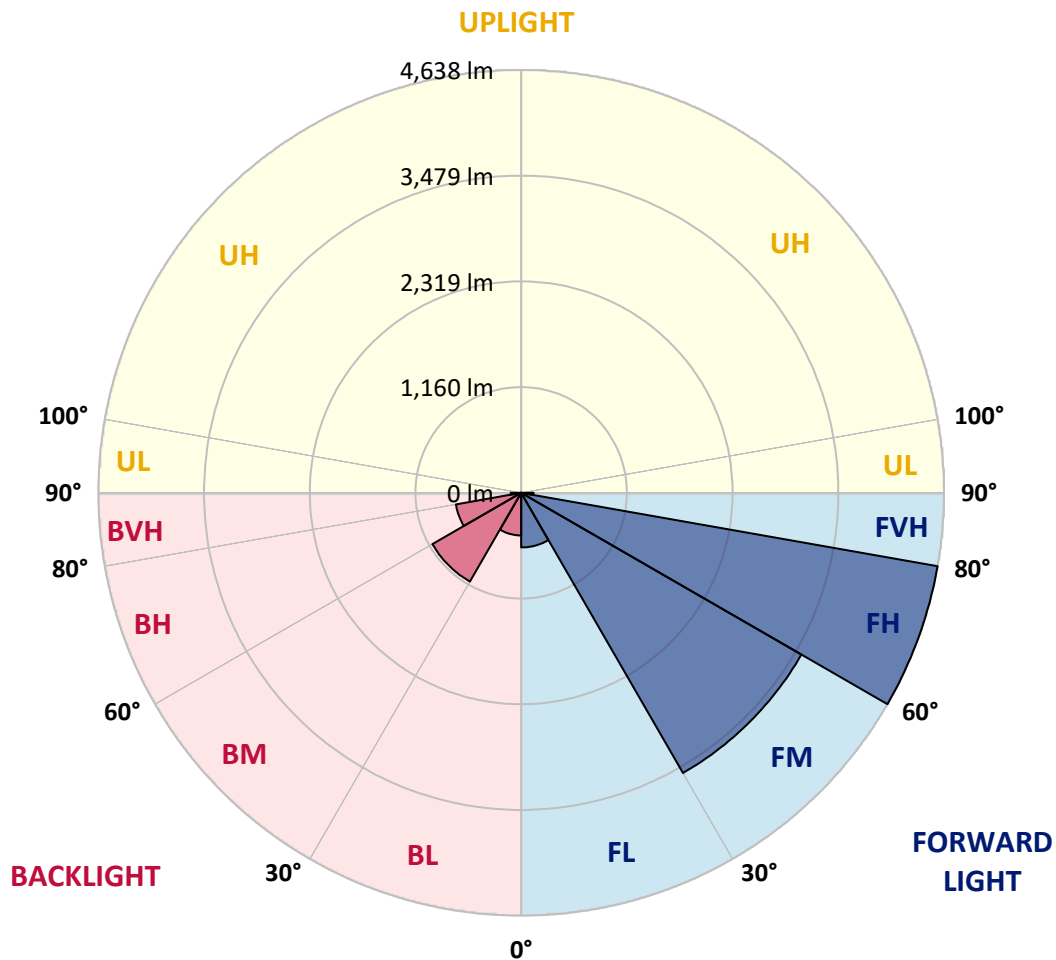
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	599.3	5.3			
FM	(30°-60°)	3549.3	31.3			
FH	(60°-80°)	4638.2	40.8			G2/5000
FVH	(80°-90°)	135.9	1.2			G2/225
BL	(0°-30°)	467.4	4.1	B1/500		
BM	(30°-60°)	1124.6	9.9	B2/2500		
BH	(60°-80°)	727.2	6.4	B2/1000		G2/1000
BVH	(80°-90°)	114.7	1.0			G2/225
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: P271360

CATALOG NUMBER: XNV2-AF-02-LED-U-T4W-7027-1200

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	1350.5	1350.5	1350.5	1350.5	1350.5	1350.5	1350.5	1350.5	1350.5	1350.5	1350.5
2.5°	1432.9	1430.0	1431.4	1426.2	1413.8	1400.5	1400.5	1386.5	1371.8	1357.1	1340.9
5°	1522.0	1517.5	1514.0	1497.7	1473.4	1446.2	1441.8	1413.8	1383.6	1353.4	1324.0
7.5°	1596.3	1591.8	1580.8	1551.5	1516.1	1475.6	1470.4	1433.7	1393.9	1351.9	1310.7
10°	1649.3	1646.4	1625.0	1587.5	1546.3	1498.5	1489.6	1452.1	1404.9	1352.7	1300.4
12.5°	1678.8	1674.4	1648.6	1604.5	1555.9	1507.3	1498.5	1462.4	1408.6	1351.2	1290.1
15°	1667.0	1664.7	1640.5	1595.6	1547.1	1505.1	1497.7	1461.0	1406.4	1346.1	1280.5
17.5°	1616.9	1622.1	1602.9	1558.7	1519.0	1489.6	1481.6	1446.9	1395.3	1333.5	1265.9
20°	1547.7	1553.6	1544.0	1499.2	1476.4	1457.2	1452.7	1424.8	1377.0	1315.2	1248.3
22.5°	1474.2	1479.2	1480.0	1438.0	1430.7	1423.4	1419.7	1399.7	1360.8	1304.1	1236.4
25°	1423.4	1429.3	1430.7	1393.9	1398.3	1400.5	1399.7	1385.8	1357.9	1304.1	1238.0
27.5°	1410.1	1413.0	1411.5	1377.7	1385.8	1398.3	1399.1	1396.1	1369.6	1318.8	1258.5
30°	1455.8	1457.2	1438.8	1388.1	1396.1	1412.3	1413.0	1411.5	1394.7	1357.1	1304.9
32.5°	1653.1	1651.5	1588.3	1457.2	1429.3	1435.1	1437.4	1450.7	1452.1	1420.4	1371.8
35°	1953.3	1952.6	1879.0	1655.1	1523.4	1492.5	1495.5	1516.1	1534.5	1513.1	1485.2
37.5°	2283.8	2285.9	2241.0	1937.9	1726.6	1597.7	1594.9	1610.3	1643.4	1650.7	1654.5
40°	2650.2	2661.3	2659.1	2262.4	2011.5	1777.3	1747.9	1730.2	1794.3	1834.8	1887.0
42.5°	3069.0	3066.1	3067.5	2618.6	2336.8	2060.0	2005.6	1923.1	1997.4	2067.3	2182.2
45°	3428.9	3440.7	3449.5	2997.6	2701.1	2383.1	2327.9	2177.8	2244.8	2349.2	2524.3
47.5°	3790.9	3770.4	3786.5	3419.3	3106.5	2751.8	2680.5	2478.1	2540.5	2687.8	2954.2
50°	4212.7	4203.1	4129.5	3969.8	3596.6	3125.7	3032.1	2791.6	2882.8	3079.3	3484.9
52.5°	4591.0	4539.4	4482.1	4402.6	4078.8	3504.0	3385.4	3117.6	3285.5	3529.0	4143.5
55°	4729.3	4694.7	4763.9	4866.9	4588.8	3889.7	3757.2	3498.1	3739.5	4043.5	4918.5
57.5°	4876.4	4888.2	5044.3	5252.6	5071.7	4301.1	4157.4	3948.5	4237.8	4618.9	5784.7
60°	4950.1	4997.2	5308.5	5699.3	5530.9	4752.2	4614.6	4465.8	4790.4	5254.8	6648.7
62.5°	4962.6	5025.9	5466.7	5856.1	6163.0	5443.2	5284.3	5123.0	5480.7	5957.6	7274.4
65°	4733.0	4830.1	5452.8	6048.9	6739.3	6598.1	6497.1	6216.0	6405.2	6576.6	7381.1
67.5°	4058.2	4164.2	4913.3	5969.4	7201.4	7796.1	7776.9	7361.9	7119.1	6815.8	6589.8
70°	2978.5	3063.8	3783.7	5103.2	6999.9	8736.6	8770.5	8104.5	7318.5	6308.0	4900.1
71°	2408.8	2482.5	3161.0	4530.6	6606.9	8785.2	8855.9	8137.7	7111.0	5849.6	4102.3
72.5°	1499.2	1540.4	2099.0	3419.3	5689.1	8284.8	8404.1	7713.7	6457.3	4944.2	2899.6
75°	565.9	582.1	778.7	1508.1	3395.8	6224.0	6368.4	5829.6	4536.5	2822.5	1213.6
77.5°	303.9	312.0	386.5	627.0	1360.8	3568.0	3753.5	3325.0	2176.2	987.6	496.0
80°	203.8	209.0	267.2	371.7	625.6	1358.5	1513.1	1335.1	814.8	563.7	353.3
82.5°	131.7	134.7	181.7	244.3	404.1	477.7	545.4	569.6	508.6	404.1	213.4
85°	86.9	89.0	120.0	156.0	250.3	235.5	241.5	315.8	346.7	266.3	109.0
87.5°	50.0	51.6	72.1	80.2	112.6	88.4	95.7	150.1	206.2	173.7	62.5
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: P271360

CATALOG NUMBER: XNV2-AF-02-LED-U-T4W-7027-1200

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1350.5	1350.5	1350.5	1350.5	1350.5	1350.5	1350.5	1350.5	1350.5	1350.5	1350.5
2.5°	1333.5	1327.7	1314.4	1306.3	1302.6	1301.1	1299.7	1302.6	1302.6	1301.1	1298.2
5°	1309.3	1298.2	1276.2	1260.7	1252.6	1250.4	1253.3	1257.1	1259.2	1259.2	1257.1
7.5°	1291.7	1275.5	1245.9	1224.7	1212.2	1208.5	1216.6	1229.8	1238.7	1243.1	1243.9
10°	1276.9	1254.8	1222.5	1200.3	1190.1	1188.5	1198.9	1215.9	1234.2	1242.4	1243.9
12.5°	1263.6	1238.7	1203.3	1182.7	1175.3	1179.0	1192.9	1208.5	1229.8	1241.5	1242.4
15°	1251.2	1225.4	1187.9	1166.4	1165.0	1170.9	1184.1	1196.7	1212.9	1227.7	1227.7
17.5°	1236.4	1208.5	1169.5	1149.7	1149.7	1154.7	1163.6	1170.2	1180.6	1194.4	1193.8
20°	1218.8	1190.1	1150.3	1129.7	1125.2	1122.3	1122.3	1123.8	1132.7	1145.2	1147.3
22.5°	1205.5	1176.2	1134.1	1109.0	1089.3	1070.2	1061.9	1059.0	1067.1	1079.0	1081.9
25°	1205.5	1176.2	1129.0	1086.9	1038.4	1001.7	986.2	981.8	989.9	1000.9	1005.4
27.5°	1225.4	1196.0	1140.8	1067.1	978.2	919.2	900.8	897.1	904.6	913.3	917.8
30°	1271.8	1243.1	1174.7	1044.3	911.2	833.8	813.2	809.6	813.2	816.9	822.0
32.5°	1349.1	1324.7	1229.8	1023.7	843.4	756.6	731.6	725.7	727.2	727.8	732.3
35°	1474.8	1463.9	1303.4	999.5	779.4	693.3	667.5	655.8	655.0	658.6	663.8
37.5°	1667.8	1674.4	1398.3	964.2	726.4	648.3	622.6	610.8	605.0	612.4	618.3
40°	1940.0	1955.5	1508.1	916.4	683.0	621.8	594.7	583.5	575.5	573.3	576.3
42.5°	2294.0	2289.6	1619.9	855.1	635.9	604.2	575.5	563.7	550.5	533.6	529.9
45°	2713.5	2650.2	1713.3	780.1	582.1	587.3	557.8	541.7	521.0	496.0	493.1
47.5°	3208.8	3034.5	1770.7	699.9	532.1	565.3	537.9	512.9	482.7	466.6	464.5
50°	3805.7	3484.0	1811.3	618.3	487.2	537.2	510.1	476.9	447.4	443.0	442.3
52.5°	4512.2	4014.7	1861.3	544.6	451.8	501.3	482.1	448.3	424.7	426.9	426.9
55°	5263.7	4563.7	1862.7	486.5	420.9	459.3	461.5	434.2	415.8	423.2	425.3
57.5°	5948.8	5043.7	1716.3	445.3	391.5	426.2	454.8	439.5	425.3	451.2	453.4
60°	6546.5	5413.0	1401.3	411.5	367.2	413.6	469.5	471.0	468.0	537.9	543.1
62.5°	6765.0	5416.7	995.1	382.7	354.0	420.9	500.4	502.7	502.7	567.4	577.0
65°	6458.9	4965.7	662.4	365.8	345.2	437.1	525.5	515.8	493.1	537.9	527.7
67.5°	5379.9	3865.2	484.2	354.7	332.6	438.0	547.5	523.3	484.2	522.5	504.8
70°	3697.6	2459.6	405.6	344.4	317.9	418.8	559.4	521.0	471.0	487.2	463.6
71°	2976.3	1962.8	385.0	340.7	312.0	407.7	560.8	518.1	464.5	474.8	453.4
72.5°	1960.6	1209.2	360.0	332.6	303.2	388.5	557.0	511.5	455.6	456.2	442.3
75°	773.5	501.3	323.7	314.2	278.1	357.6	540.9	497.5	438.6	423.9	418.0
77.5°	390.9	327.5	284.9	288.4	248.8	326.1	518.1	474.8	415.0	395.3	390.9
80°	285.5	248.8	243.6	250.3	215.7	295.2	489.4	443.9	385.0	405.6	396.7
82.5°	173.7	151.6	190.6	206.8	180.3	263.5	455.6	407.7	346.7	319.3	309.0
85°	82.5	89.0	137.6	152.4	133.2	210.6	416.5	367.9	302.5	261.2	265.7
87.5°	40.5	49.2	78.7	91.3	87.6	154.6	314.2	285.5	238.5	196.5	192.1
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)