

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: P198949

Luminaire Tested: **XNV2-AF-02-LED-U-T4FT-7050-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198949  
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-7050-800  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 800mA 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: 9820 lumens  
Efficiency: N/A  
Efficacy: 115.5 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G2

Input Watts (W): 85  
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

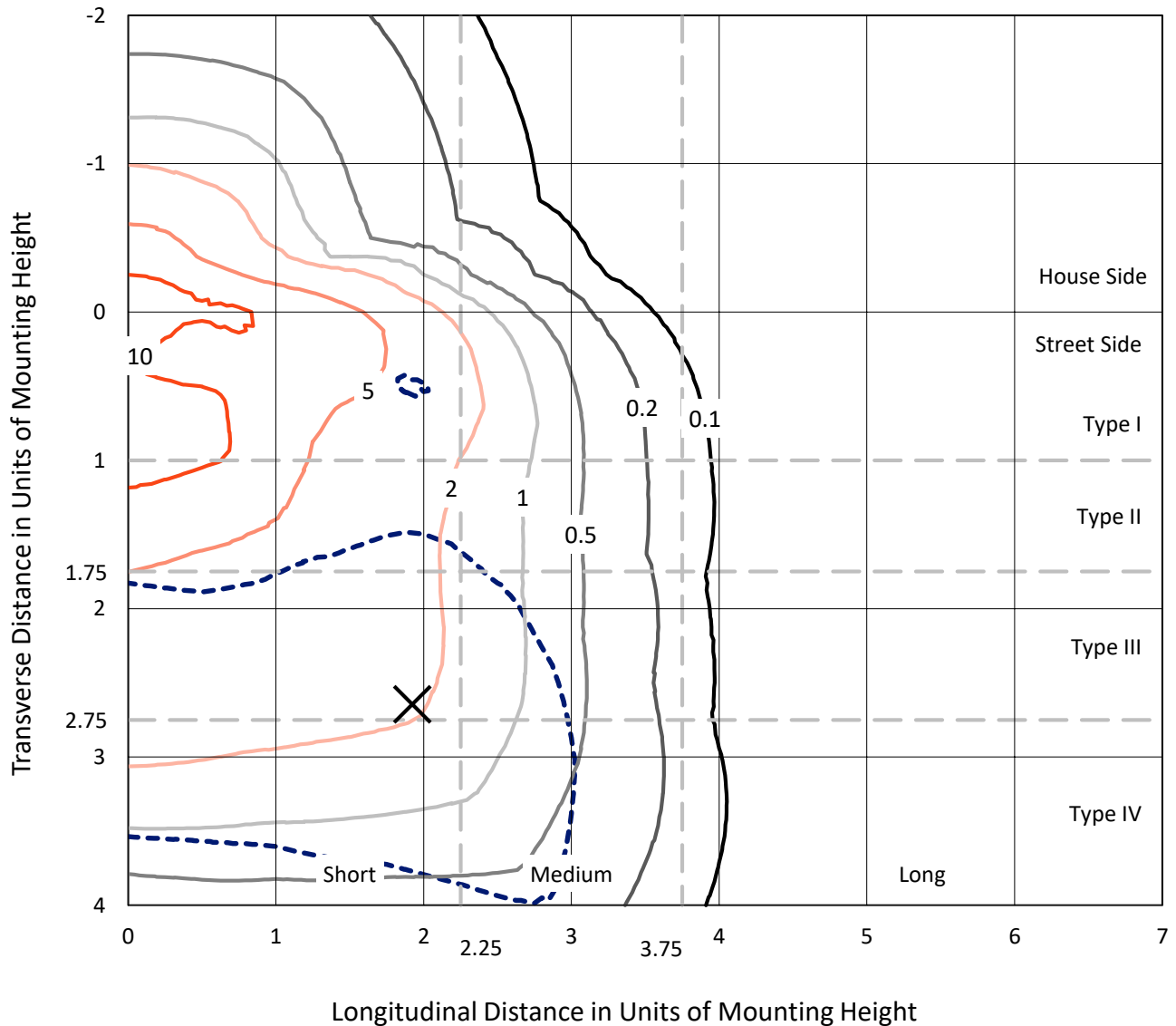


REPORT NUMBER: P198949

CATALOG NUMBER: XNV2-AF-02-LED-U-T4FT-7050-800

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

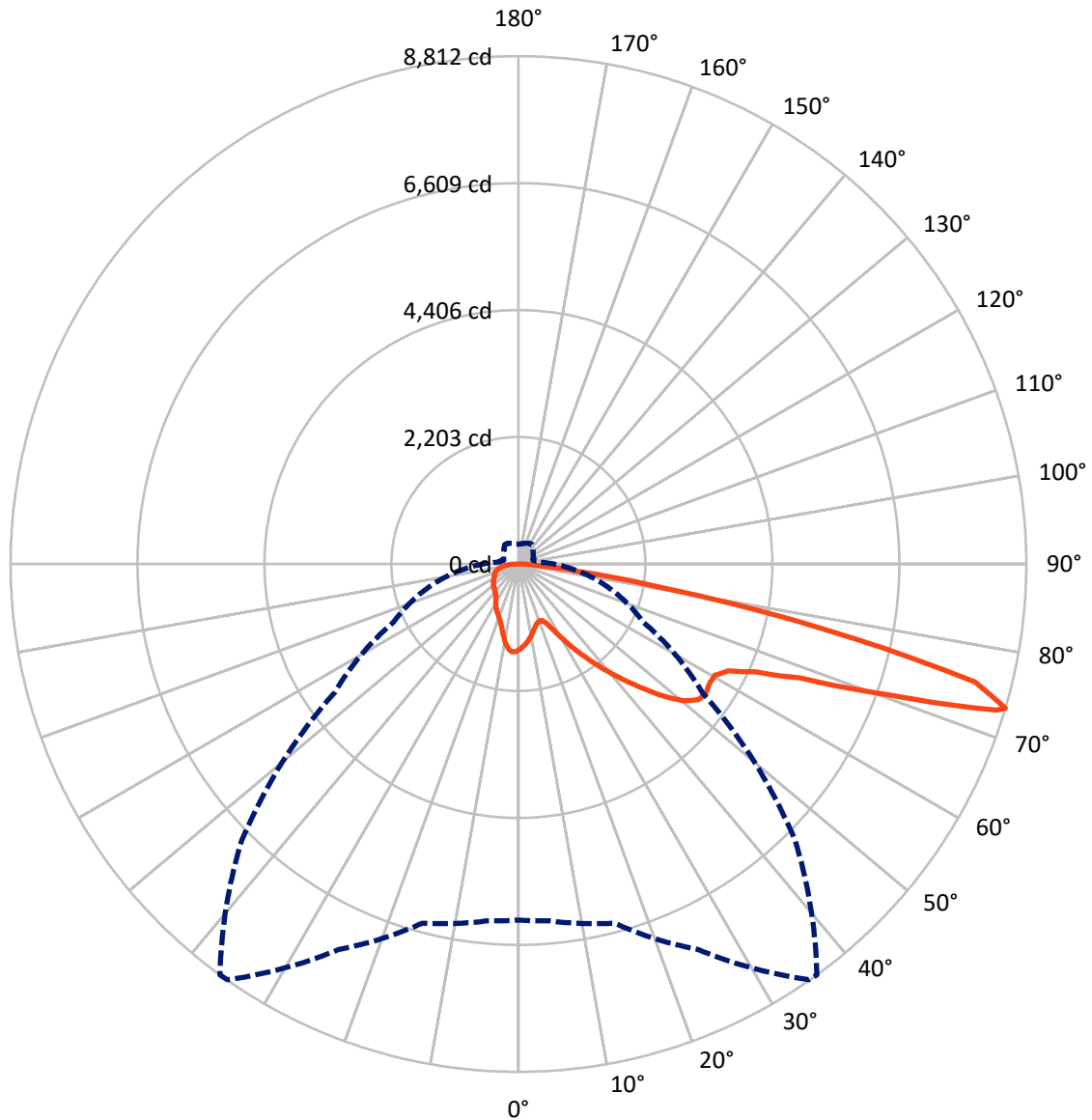


Based on 10 foot mounting height. Maximum calculated value = 14.9 fc  
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P198949

CATALOG NUMBER: XNV2-AF-02-LED-U-T4FT-7050-800

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P198949

CATALOG NUMBER: XNV2-AF-02-LED-U-T4FT-7050-800

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1893.6	0.0	1893.6
	% Fixture	19.3	0.0	19.3
<b>Street Side</b>	Lumens	7926.4	0.0	7926.4
	% Fixture	80.7	0.0	80.7
<b>Total</b>	Lumens	9820.0	0.0	9820.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	135.1	1.4
10°-20°	339.3	3.5
20°-30°	544.0	5.5
30°-40°	899.8	9.2
40°-50°	1392.4	14.2
50°-60°	1864.0	19.0
60°-70°	2435.0	24.8
70°-80°	1989.0	20.3
80°-90°	221.4	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°	9820.0	100.0
0°-180°	9820.0	100.0



REPORT NUMBER: P198949

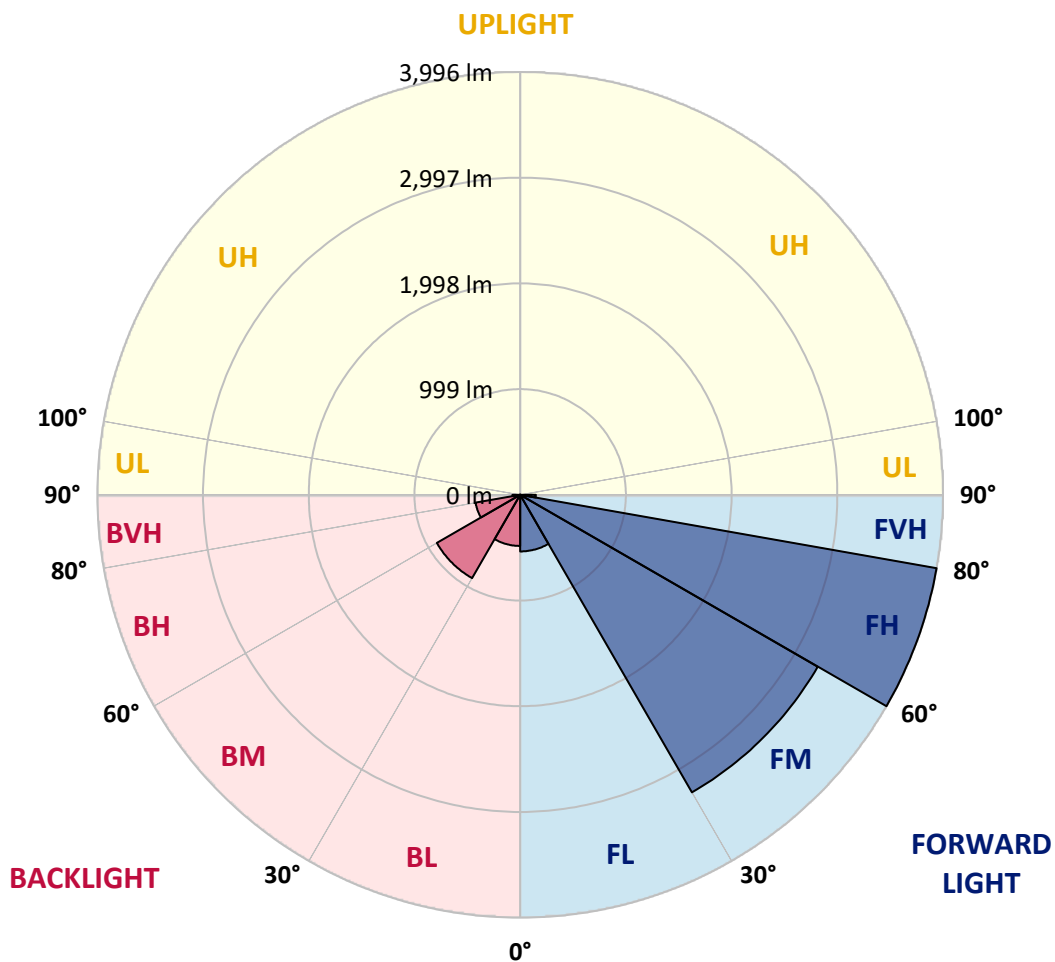
CATALOG NUMBER: XNV2-AF-02-LED-U-T4FT-7050-800

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	535.1	5.4			
FM (30°-60°)	3246.8	33.1			
FH (60°-80°)	3996.0	40.7			G2/5000
FVH (80°-90°)	148.5	1.5			G2/225
BL (0°-30°)	483.4	4.9	B1/500		
BM (30°-60°)	909.4	9.3	B1/1000		
BH (60°-80°)	427.9	4.4	B1/500		G1/500
BVH (80°-90°)	72.9	0.7			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G2**

Type IV Short





REPORT NUMBER: P198949

CATALOG NUMBER: XNV2-AF-02-LED-U-T4FT-7050-800

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	1487.4	1487.4	1487.4	1487.4	1487.4	1487.4	1487.4	1487.4	1487.4	1487.4	1487.4
2.5°	1430.7	1434.4	1435.0	1439.4	1439.4	1438.8	1440.6	1448.1	1451.9	1460.6	1468.1
5°	1360.2	1364.5	1366.4	1373.9	1383.2	1383.9	1390.7	1405.1	1418.8	1438.2	1454.4
7.5°	1280.9	1285.9	1290.9	1306.5	1320.2	1321.5	1334.6	1357.7	1375.8	1399.5	1428.8
10°	1204.2	1205.4	1210.4	1230.4	1248.5	1250.4	1269.1	1295.3	1319.6	1352.7	1385.7
12.5°	1141.2	1144.9	1143.7	1158.6	1174.2	1175.5	1200.4	1233.5	1269.1	1306.5	1345.8
15°	1119.3	1118.7	1105.6	1105.0	1111.8	1113.1	1137.4	1176.1	1216.0	1262.2	1312.7
17.5°	1134.3	1129.3	1095.0	1073.8	1069.4	1070.7	1088.8	1131.2	1173.6	1226.6	1287.2
20°	1216.7	1197.3	1116.8	1065.7	1051.3	1051.3	1061.9	1096.2	1143.0	1204.8	1280.9
22.5°	1411.9	1382.0	1210.4	1119.3	1068.8	1063.8	1055.7	1081.9	1133.7	1207.9	1306.5
25°	1657.8	1643.4	1382.0	1262.2	1158.0	1141.8	1088.1	1097.5	1153.0	1241.6	1376.4
27.5°	1885.5	1860.6	1607.2	1470.0	1322.7	1297.8	1184.2	1146.2	1199.2	1304.0	1477.5
30°	2018.4	2001.6	1838.7	1707.7	1532.4	1500.5	1337.7	1242.2	1281.5	1407.0	1621.0
32.5°	2163.2	2153.2	2070.8	1951.6	1759.5	1722.7	1536.1	1398.8	1407.6	1543.6	1793.8
35°	2303.5	2316.6	2269.9	2182.5	2004.1	1969.7	1802.5	1603.5	1562.9	1697.1	1978.5
37.5°	2472.0	2475.1	2445.8	2389.0	2261.1	2233.0	2095.2	1821.9	1732.0	1860.6	2156.9
40°	2808.3	2759.0	2644.2	2599.3	2523.2	2505.7	2348.5	2022.2	1889.3	2028.4	2325.4
42.5°	3172.1	3095.3	2915.6	2842.0	2811.4	2795.2	2559.4	2155.7	2036.5	2196.2	2490.7
45°	3465.3	3402.9	3227.0	3135.9	3139.6	3113.4	2743.4	2274.8	2196.2	2364.7	2675.4
47.5°	3754.2	3650.0	3452.8	3439.7	3483.4	3444.7	2919.4	2394.0	2362.8	2548.1	2860.1
50°	3772.9	3678.1	3598.2	3703.0	3777.9	3729.8	3079.1	2550.0	2535.6	2770.2	3098.4
52.5°	3545.2	3531.4	3653.1	3829.7	3953.8	3910.8	3209.5	2710.3	2712.2	3047.9	3388.6
55°	3462.2	3444.7	3590.7	3807.8	3975.7	3950.1	3306.8	2891.3	2908.1	3384.8	3699.9
57.5°	3601.9	3558.3	3587.0	3766.7	3924.5	3909.5	3407.9	3092.2	3122.8	3772.9	3987.5
60°	4035.6	3946.3	3794.1	3827.8	3926.4	3917.6	3552.6	3316.2	3367.3	4177.2	4169.7
62.5°	4685.1	4584.0	4273.9	4124.2	4102.3	4085.5	3791.6	3591.3	3616.9	4469.2	4063.6
65°	5397.6	5289.0	4920.3	4675.1	4546.6	4510.4	4177.2	3923.3	3762.9	4468.6	3650.6
67.5°	6197.5	6082.7	5715.2	5481.2	5342.1	5280.3	4803.0	4191.5	3715.5	4090.5	2921.2
70°	7016.7	6907.5	6739.0	6820.8	6881.9	6787.7	5788.8	4280.8	3374.8	3207.0	1961.6
72.5°	6581.8	6573.1	6701.0	7475.9	8654.5	8673.2	6773.4	4028.7	2607.4	1906.1	1045.7
73°	6178.1	6214.9	6452.0	7379.2	8806.1	8812.4	6792.7	3898.3	2394.0	1642.2	918.4
75°	3200.8	3450.3	4330.1	5983.5	8154.1	8183.4	5987.8	2951.2	1426.9	912.2	618.9
77.5°	857.3	846.0	1395.1	2915.0	5436.3	5397.6	3783.5	1428.8	683.8	572.1	434.3
80°	293.9	297.6	474.8	1066.3	2537.5	2628.0	1642.2	623.3	449.9	398.7	307.6
82.5°	149.7	154.7	248.3	453.6	1061.3	1038.8	528.5	366.9	301.4	242.1	172.2
85°	79.9	82.4	136.6	235.2	389.3	393.7	185.9	195.9	191.5	137.3	84.9
87.5°	39.3	40.6	65.5	103.6	144.1	139.1	64.9	84.9	94.2	77.4	46.8
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: P198949

CATALOG NUMBER: XNV2-AF-02-LED-U-T4FT-7050-800

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1487.4	1487.4	1487.4	1487.4	1487.4	1487.4	1487.4	1487.4	1487.4	1487.4	1487.4
2.5°	1477.5	1477.5	1485.6	1499.3	1509.3	1518.6	1524.9	1534.9	1540.5	1539.9	1539.2
5°	1467.5	1473.7	1489.9	1506.8	1518.0	1525.5	1525.5	1529.9	1529.9	1528.0	1525.5
7.5°	1444.4	1455.0	1478.7	1493.7	1496.8	1488.7	1472.5	1460.0	1444.4	1436.3	1433.2
10°	1407.6	1421.3	1451.3	1458.1	1441.9	1413.2	1373.9	1340.2	1310.2	1296.5	1292.2
12.5°	1371.4	1389.5	1417.6	1407.0	1368.3	1312.1	1251.6	1205.4	1171.7	1158.6	1154.3
15°	1341.4	1363.3	1385.1	1352.1	1284.7	1206.7	1139.9	1096.9	1071.3	1061.3	1058.8
17.5°	1321.5	1347.1	1354.5	1292.8	1199.2	1111.8	1052.6	1024.5	1013.3	1008.9	1007.6
20°	1322.7	1351.4	1333.3	1235.4	1116.8	1028.9	989.5	981.4	981.4	981.4	980.8
22.5°	1357.0	1382.0	1324.6	1181.7	1037.6	959.0	942.1	949.0	954.0	954.0	953.4
25°	1428.2	1441.9	1330.8	1129.9	963.3	898.5	899.1	912.2	916.6	916.6	915.3
27.5°	1536.7	1525.5	1342.1	1072.5	890.3	843.6	852.3	864.1	867.3	865.4	864.8
30°	1672.8	1627.8	1351.4	1005.1	821.7	792.4	799.9	806.7	804.2	799.9	799.3
32.5°	1825.0	1732.0	1345.8	929.7	761.2	739.4	743.7	747.5	743.7	733.1	733.1
35°	1976.0	1826.2	1315.2	847.3	713.1	688.2	687.6	699.4	698.8	686.3	686.9
37.5°	2108.3	1900.5	1256.0	771.8	672.0	650.8	653.3	660.7	664.5	647.6	645.8
40°	2223.7	1951.6	1172.4	707.5	638.9	640.2	633.3	621.4	617.1	609.6	608.3
42.5°	2332.2	1987.2	1083.8	653.9	622.1	636.4	613.3	585.2	573.4	580.3	584.6
45°	2438.9	2027.1	998.3	609.6	600.8	625.2	593.4	562.2	548.4	551.6	555.9
47.5°	2569.3	2082.7	895.3	562.2	568.4	604.6	580.9	547.2	526.6	514.1	510.4
50°	2740.9	2163.2	761.8	511.0	534.1	582.1	570.3	525.3	502.9	477.9	471.7
52.5°	2955.5	2239.3	627.0	469.8	506.0	562.8	552.8	506.6	479.2	449.2	444.2
55°	3169.6	2249.9	511.0	434.3	474.2	536.6	531.6	491.7	453.0	428.6	423.6
57.5°	3319.3	2149.4	433.0	404.3	443.6	504.1	512.2	473.6	431.1	412.4	409.3
60°	3321.8	1909.2	385.6	384.3	420.5	476.1	492.3	452.3	417.4	404.9	402.4
62.5°	3057.9	1538.6	355.0	369.4	403.7	453.0	477.3	440.5	414.3	409.3	406.8
65°	2563.1	1136.8	330.7	355.6	388.1	433.6	464.8	436.7	413.0	411.2	409.3
67.5°	1892.4	779.3	310.1	338.2	370.6	413.7	453.0	431.1	405.6	413.0	410.5
70°	1190.5	520.4	290.8	318.2	347.5	390.6	437.4	421.2	396.2	391.8	383.7
72.5°	672.0	376.2	267.7	292.6	317.6	360.0	416.2	404.3	375.0	357.5	349.4
73°	607.1	356.3	262.0	286.4	310.7	353.8	411.2	399.3	368.7	349.4	341.9
75°	444.2	291.4	236.5	260.8	282.0	325.1	387.5	374.4	341.3	318.2	313.2
77.5°	321.9	224.6	203.4	225.2	244.0	285.1	351.9	336.9	304.5	292.0	287.0
80°	232.1	170.3	168.5	189.7	205.9	247.7	313.8	298.2	267.0	303.9	295.7
82.5°	138.5	109.2	123.5	147.2	164.1	207.8	272.7	254.6	224.6	227.1	193.4
85°	66.1	61.8	76.7	96.7	108.6	142.3	227.1	212.8	179.7	147.2	144.1
87.5°	29.3	28.1	36.8	43.1	58.0	85.5	155.4	137.9	130.4	78.0	61.1
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)