

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: P271355

Luminaire Tested: **XNV2-AF-02-LED-U-T4FT-7027-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271355  
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-7027-800  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 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: 8532.1 lumens  
Efficiency: N/A  
Efficacy: 100.4 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

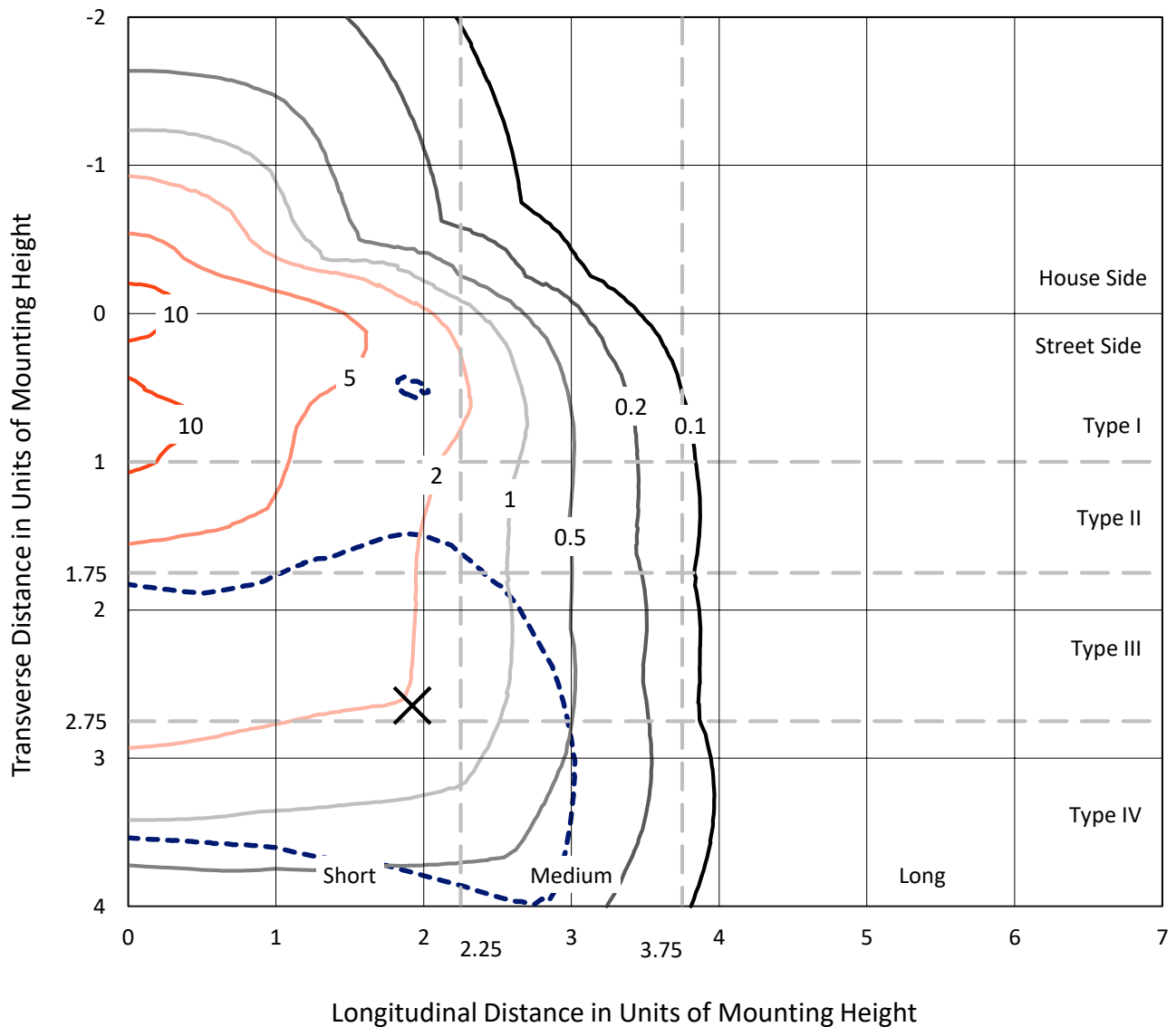
Input Watts (W): 85  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



REPORT NUMBER: P271355  
 CATALOG NUMBER: XNV2-AF-02-LED-U-T4FT-7027-800

### Iso-Footcandle Lines of Horizontal Illumination

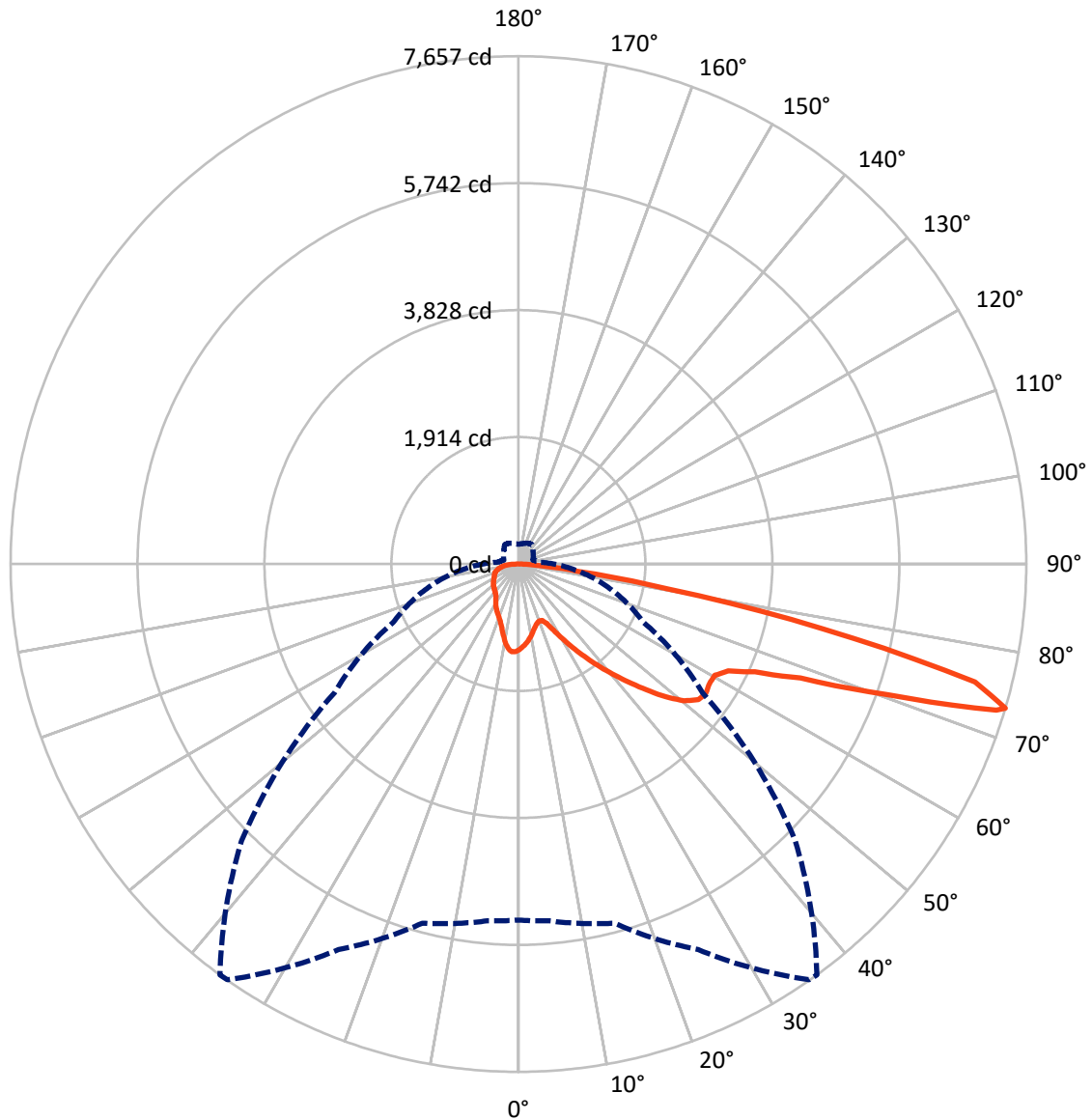
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 12.9 fc  
 Type IV - Short - Non-Cutoff

REPORT NUMBER: P271355  
CATALOG NUMBER: XNV2-AF-02-LED-U-T4FT-7027-800

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P271355

CATALOG NUMBER: XNV2-AF-02-LED-U-T4FT-7027-800

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1645.2	0.0	1645.2
	% Fixture	19.3	0.0	19.3
<b>Street Side</b>	Lumens	6886.8	0.0	6886.8
	% Fixture	80.7	0.0	80.7
<b>Total</b>	Lumens	8532.1	0.0	8532.1
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.4	1.4
10°-20°	294.8	3.5
20°-30°	472.7	5.5
30°-40°	781.8	9.2
40°-50°	1209.8	14.2
50°-60°	1619.5	19.0
60°-70°	2115.6	24.8
70°-80°	1728.1	20.3
80°-90°	192.4	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°	8532.1	100.0
0°-180°	8532.1	100.0



REPORT NUMBER: P271355

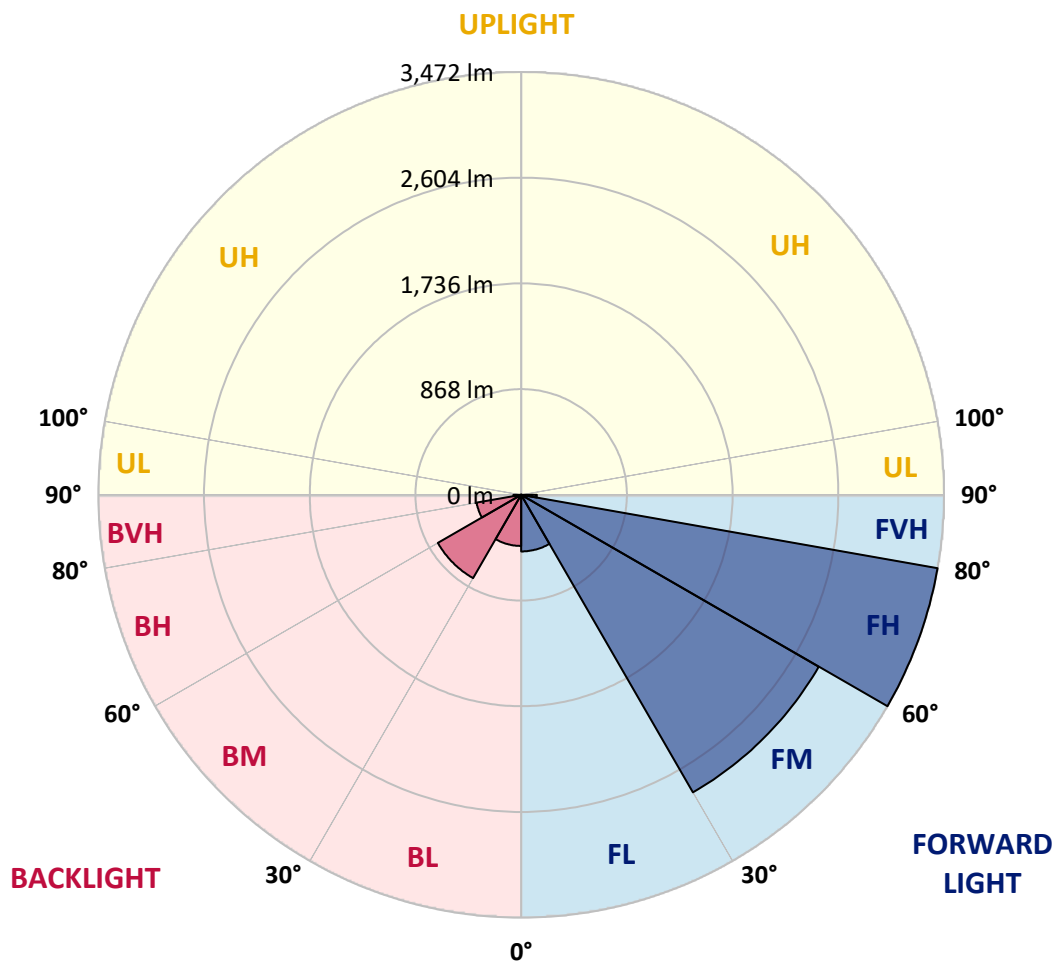
CATALOG NUMBER: XNV2-AF-02-LED-U-T4FT-7027-800

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

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	464.9	5.4			
FM (30°-60°)	2821.0	33.1			
FH (60°-80°)	3471.9	40.7			G2/5000
FVH (80°-90°)	129.0	1.5			G2/225
BL (0°-30°)	420.0	4.9	B1/500		
BM (30°-60°)	790.1	9.3	B1/1000		
BH (60°-80°)	371.8	4.4	B1/500		G1/500
BVH (80°-90°)	63.3	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: P271355

CATALOG NUMBER: XNV2-AF-02-LED-U-T4FT-7027-800

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	1292.3	1292.3	1292.3	1292.3	1292.3	1292.3	1292.3	1292.3	1292.3	1292.3	1292.3
2.5°	1243.1	1246.3	1246.8	1250.6	1250.6	1250.1	1251.7	1258.2	1261.5	1269.0	1275.6
5°	1181.8	1185.6	1187.2	1193.7	1201.8	1202.4	1208.3	1220.7	1232.7	1249.5	1263.6
7.5°	1112.9	1117.2	1121.7	1135.2	1147.0	1148.2	1159.5	1179.7	1195.4	1215.9	1241.4
10°	1046.3	1047.3	1051.6	1069.1	1084.8	1086.4	1102.6	1125.3	1146.5	1175.3	1204.0
12.5°	991.5	994.8	993.6	1006.7	1020.3	1021.4	1043.0	1071.7	1102.6	1135.2	1169.4
15°	972.5	972.0	960.6	960.1	965.9	967.0	988.2	1021.8	1056.5	1096.7	1140.6
17.5°	985.5	981.2	951.3	932.9	929.1	930.3	945.9	982.8	1019.7	1065.7	1118.3
20°	1057.0	1040.2	970.3	926.0	913.4	913.4	922.6	952.5	993.2	1046.7	1112.9
22.5°	1226.7	1200.8	1051.6	972.5	928.6	924.3	917.2	939.9	985.0	1049.5	1135.2
25°	1440.3	1427.9	1200.8	1096.7	1006.1	992.1	945.5	953.6	1001.8	1078.8	1195.9
27.5°	1638.1	1616.5	1396.4	1277.2	1149.2	1127.6	1028.9	995.9	1041.9	1133.0	1283.7
30°	1753.8	1739.1	1597.5	1483.7	1331.4	1303.7	1162.2	1079.4	1113.4	1222.5	1408.4
32.5°	1879.4	1870.8	1799.2	1695.7	1528.6	1496.8	1334.6	1215.3	1223.0	1341.1	1558.5
35°	2001.5	2012.8	1972.0	1896.2	1741.3	1711.5	1566.1	1393.2	1358.0	1474.5	1718.9
37.5°	2147.8	2150.5	2125.0	2075.7	1964.6	1940.2	1820.3	1583.0	1504.8	1616.5	1874.0
40°	2439.9	2397.1	2297.3	2258.3	2192.3	2177.0	2040.4	1756.9	1641.5	1762.4	2020.4
42.5°	2756.0	2689.3	2533.2	2469.3	2442.8	2428.6	2223.7	1873.0	1769.4	1908.2	2164.0
45°	3010.8	2956.6	2803.7	2724.6	2727.9	2705.1	2383.7	1976.5	1908.2	2054.6	2324.5
47.5°	3261.7	3171.2	3000.0	2988.7	3026.5	2993.0	2536.5	2080.0	2052.8	2214.0	2484.9
50°	3278.1	3195.6	3126.2	3217.3	3282.3	3240.6	2675.2	2215.5	2203.1	2406.9	2692.0
52.5°	3080.2	3068.3	3173.9	3327.4	3435.3	3397.8	2788.5	2354.8	2356.4	2648.2	2944.1
55°	3008.1	2993.0	3119.8	3308.4	3454.3	3432.1	2873.0	2512.1	2526.8	2940.8	3214.7
57.5°	3129.5	3091.5	3116.5	3272.6	3409.7	3396.9	2961.0	2686.7	2713.2	3278.1	3464.6
60°	3506.3	3428.7	3296.5	3325.7	3411.5	3403.8	3086.7	2881.3	2925.7	3629.3	3622.9
62.5°	4070.6	3982.7	3713.4	3583.2	3564.2	3549.7	3294.4	3120.4	3142.5	3883.1	3530.7
65°	4689.6	4595.3	4274.9	4062.0	3950.2	3918.8	3629.3	3408.7	3269.4	3882.5	3171.7
67.5°	5384.6	5284.9	4965.7	4762.4	4641.5	4587.7	4173.0	3641.8	3228.1	3554.0	2538.2
70°	6096.3	6001.5	5855.2	5926.2	5979.3	5897.5	5029.5	3719.3	2932.2	2786.4	1704.4
72.5°	5718.5	5711.0	5822.1	6495.4	7519.4	7535.6	5884.9	3500.2	2265.4	1656.0	908.5
73°	5367.8	5399.8	5605.9	6411.4	7651.1	7656.6	5901.8	3387.0	2080.0	1426.8	798.0
75°	2781.0	2997.7	3762.1	5198.8	7084.7	7110.2	5202.4	2564.1	1239.8	792.6	537.7
77.5°	744.9	735.1	1212.2	2532.7	4723.3	4689.6	3287.3	1241.4	594.0	497.1	377.3
80°	255.3	258.6	412.5	926.4	2204.7	2283.3	1426.8	541.6	390.9	346.3	267.2
82.5°	130.2	134.4	215.8	394.0	922.1	902.5	459.2	318.8	261.9	210.4	149.6
85°	69.3	71.5	118.8	204.4	338.2	342.1	161.5	170.1	166.5	119.3	73.8
87.5°	34.1	35.3	57.0	90.0	125.3	120.9	56.4	73.8	81.8	67.3	40.7
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: P271355

CATALOG NUMBER: XNV2-AF-02-LED-U-T4FT-7027-800

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1292.3	1292.3	1292.3	1292.3	1292.3	1292.3	1292.3	1292.3	1292.3	1292.3	1292.3
2.5°	1283.7	1283.7	1290.8	1302.6	1311.3	1319.5	1324.9	1333.5	1338.5	1337.8	1337.3
5°	1275.1	1280.4	1294.5	1309.2	1318.9	1325.4	1325.4	1329.2	1329.2	1327.5	1325.4
7.5°	1254.9	1264.2	1284.8	1297.8	1300.4	1293.4	1279.4	1268.4	1254.9	1247.8	1245.2
10°	1223.0	1234.9	1261.0	1266.9	1252.7	1227.9	1193.7	1164.5	1138.4	1126.5	1122.7
12.5°	1191.5	1207.2	1231.7	1222.5	1188.7	1139.9	1087.5	1047.3	1018.0	1006.7	1002.9
15°	1165.6	1184.4	1203.5	1174.8	1116.1	1048.4	990.4	953.0	930.7	922.1	920.0
17.5°	1148.2	1170.4	1176.9	1123.2	1041.9	965.9	914.6	890.1	880.3	876.6	875.5
20°	1149.2	1174.2	1158.5	1073.4	970.3	894.0	859.8	852.8	852.8	852.8	852.2
22.5°	1179.0	1200.8	1150.9	1026.8	901.4	833.2	818.5	824.6	828.9	828.9	828.2
25°	1240.9	1252.7	1156.3	981.8	837.0	780.5	781.2	792.6	796.3	796.3	795.3
27.5°	1335.2	1325.4	1166.0	931.8	773.6	732.8	740.6	750.9	753.5	751.9	751.3
30°	1453.4	1414.3	1174.2	873.3	714.0	688.5	695.0	700.9	698.7	695.0	694.4
32.5°	1585.6	1504.8	1169.4	807.8	661.3	642.4	646.2	649.5	646.2	637.0	637.0
35°	1716.8	1586.6	1142.7	736.3	619.7	597.9	597.5	607.8	607.2	596.4	596.8
37.5°	1831.7	1651.3	1091.3	670.6	583.9	565.5	567.5	574.0	577.3	562.7	561.1
40°	1932.1	1695.7	1018.6	614.7	555.2	556.2	550.2	539.9	536.1	529.6	528.6
42.5°	2026.3	1726.5	941.7	568.1	540.5	552.9	532.9	508.5	498.2	504.2	507.9
45°	2119.0	1761.2	867.4	529.6	522.0	543.1	515.5	488.4	476.6	479.2	483.0
47.5°	2232.4	1809.5	777.9	488.4	493.9	525.2	504.7	475.5	457.5	446.6	443.5
50°	2381.4	1879.4	662.0	444.0	464.1	505.7	495.4	456.5	436.9	415.2	409.8
52.5°	2568.0	1945.5	544.8	408.2	439.6	488.9	480.4	440.2	416.4	390.4	386.0
55°	2753.8	1954.8	444.0	377.3	412.1	466.2	461.9	427.1	393.5	372.3	368.0
57.5°	2884.0	1867.5	376.2	351.2	385.5	438.1	445.1	411.5	374.7	358.3	355.5
60°	2886.2	1658.8	335.0	333.9	365.4	413.6	427.8	393.0	362.6	351.9	349.6
62.5°	2656.7	1336.8	308.5	321.0	350.8	393.5	414.7	382.7	360.0	355.5	353.5
65°	2226.9	987.6	287.3	308.9	337.1	376.7	403.9	379.4	358.9	357.3	355.5
67.5°	1644.2	677.1	269.4	293.8	322.0	359.4	393.5	374.7	352.3	358.9	356.6
70°	1034.3	452.0	252.7	276.5	301.9	339.4	380.1	365.9	344.2	340.5	333.5
72.5°	583.9	327.0	232.5	254.2	275.9	312.8	361.6	351.2	325.7	310.6	303.5
73°	527.5	309.6	227.7	248.8	270.0	307.4	357.3	346.9	320.3	303.5	297.1
75°	386.0	253.1	205.4	226.6	245.0	282.4	336.7	325.2	296.5	276.5	272.1
77.5°	279.7	195.1	176.7	195.7	212.0	247.8	305.8	292.8	264.6	253.7	249.4
80°	201.7	148.0	146.3	164.7	178.9	215.2	272.6	259.2	232.0	264.0	256.9
82.5°	120.4	95.0	107.3	127.9	142.7	180.5	237.0	221.2	195.1	197.3	168.1
85°	57.4	53.7	66.7	84.0	94.3	123.5	197.3	184.8	156.1	127.9	125.3
87.5°	25.5	24.4	32.0	37.4	50.5	74.3	134.9	119.8	113.2	67.7	53.1
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)