

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: P271357

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

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271357  
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  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 10352.7 lumens  
Efficiency: N/A  
Efficacy: 93.3 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

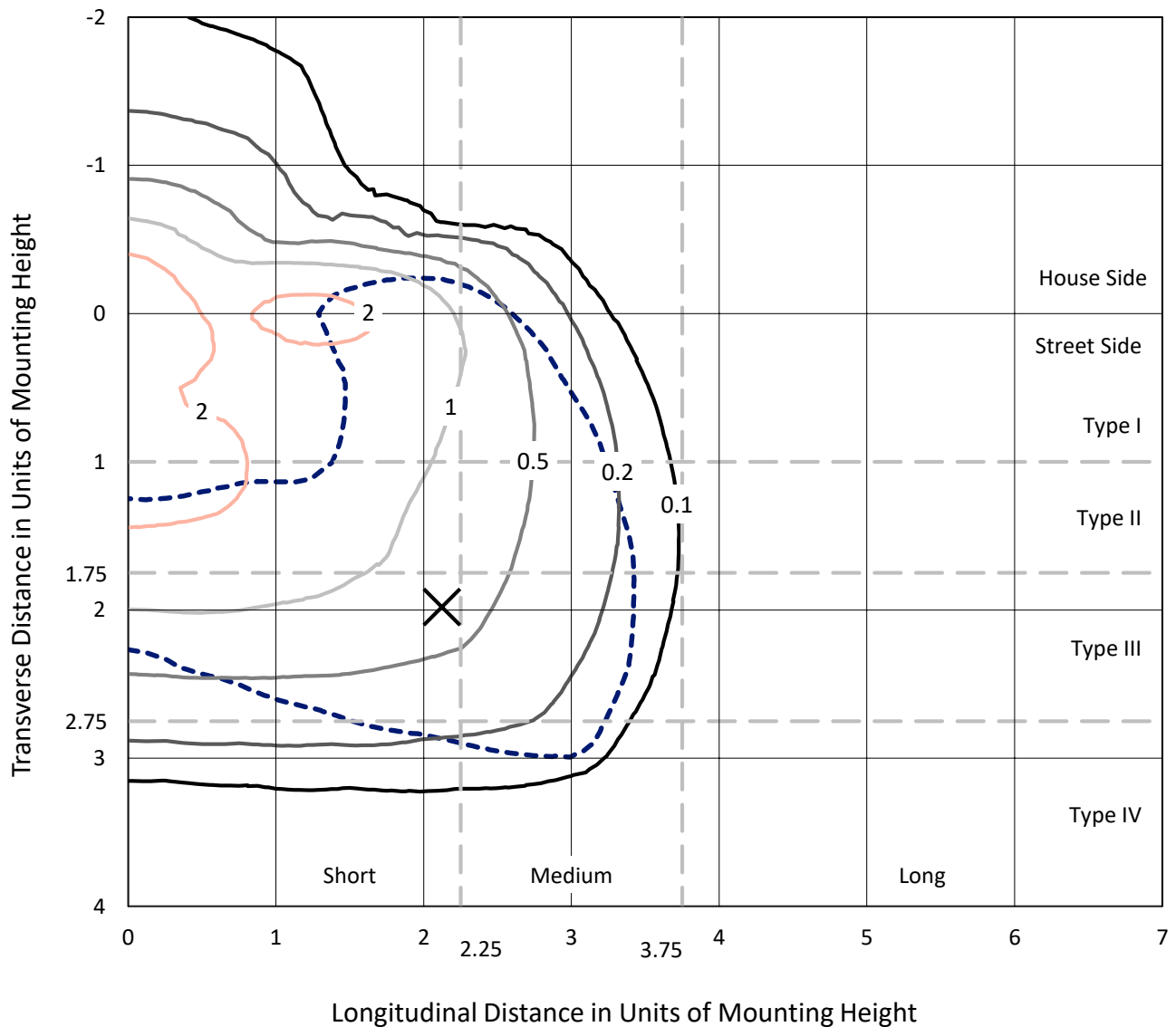
Input Watts (W): 111  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

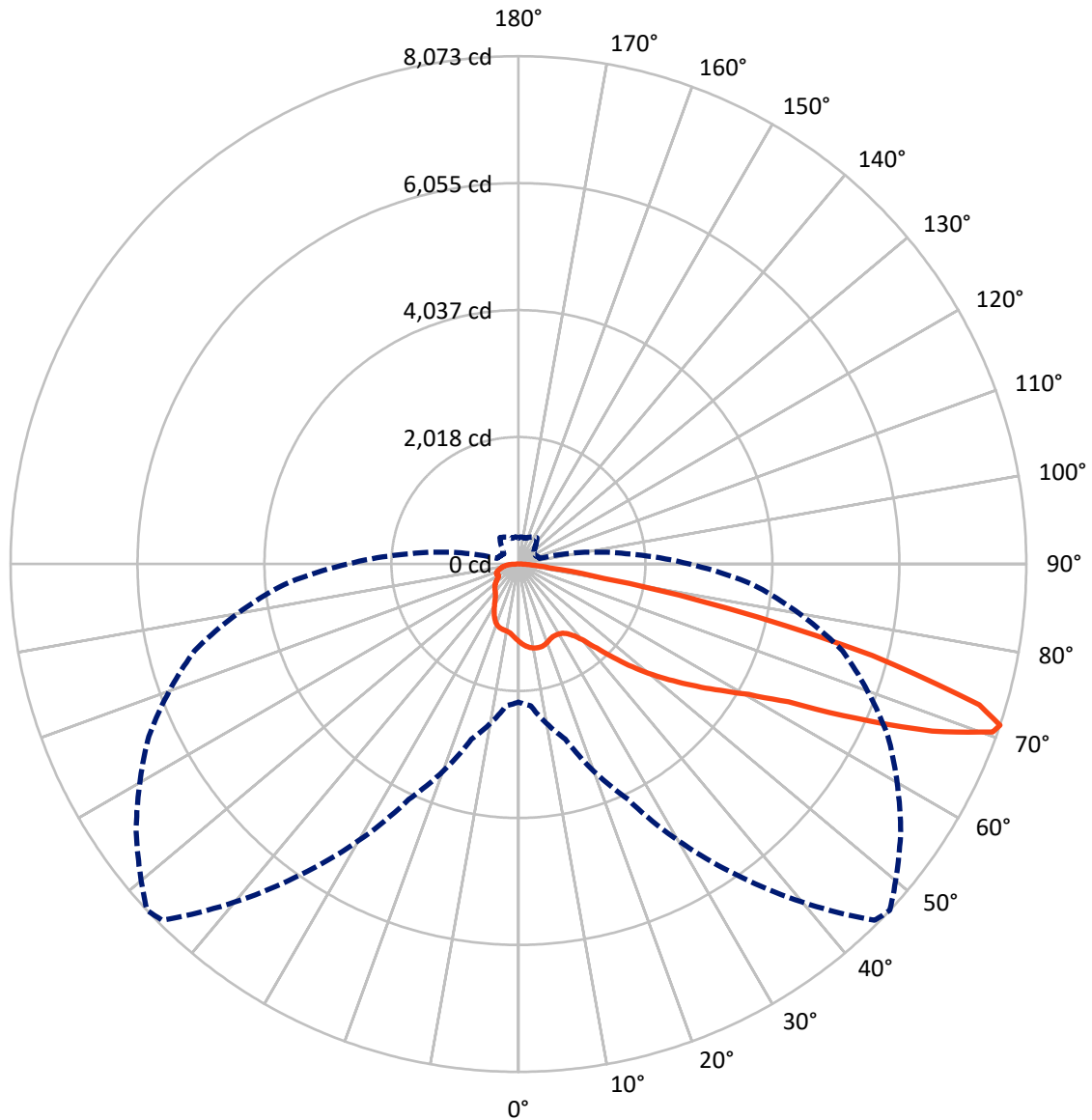


Based on 20 foot mounting height. Maximum calculated value = 3.5 fc  
 Type IV - Short - Semi-Cutoff

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### 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	2218.7	0.0	2218.7
	% Fixture	21.4	0.0	21.4
<b>Street Side</b>	Lumens	8133.9	0.0	8133.9
	% Fixture	78.6	0.0	78.6
<b>Total</b>	Lumens	10352.7	0.0	10352.7
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	117.5	1.1
10°-20°	343.9	3.3
20°-30°	511.0	4.9
30°-40°	733.7	7.1
40°-50°	1300.9	12.6
50°-60°	2226.1	21.5
60°-70°	3160.2	30.5
70°-80°	1730.8	16.7
80°-90°	228.5	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°	10352.7	100.0
0°-180°	10352.7	100.0

**Coefficient of Utilization**



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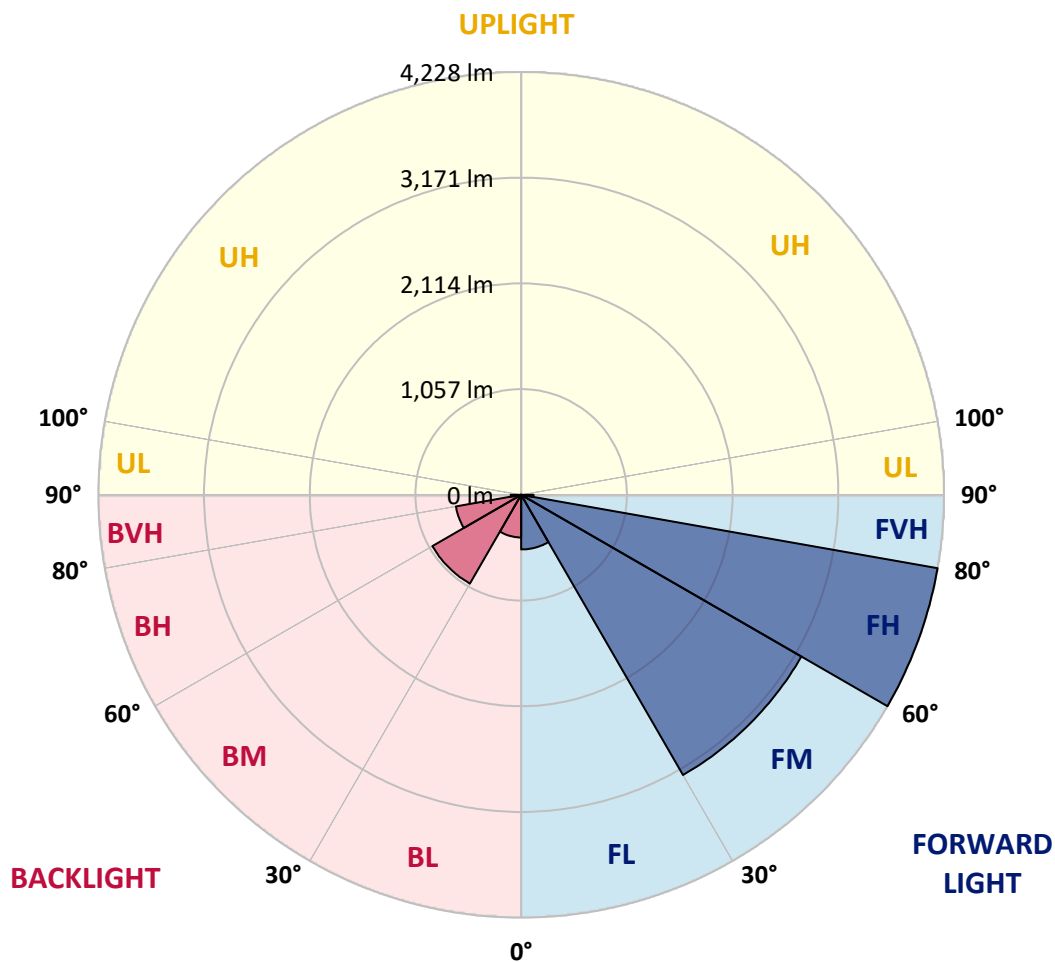
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	546.4	5.3			
FM	(30°-60°)	3235.5	31.3			
FH	(60°-80°)	4228.1	40.8			G2/5000
FVH	(80°-90°)	123.9	1.2			G2/225
BL	(0°-30°)	426.1	4.1	B1/500		
BM	(30°-60°)	1025.2	9.9	B2/2500		
BH	(60°-80°)	662.9	6.4	B2/1000		G2/1000
BVH	(80°-90°)	104.6	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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	1231.0	1231.0	1231.0	1231.0	1231.0	1231.0	1231.0	1231.0	1231.0	1231.0	1231.0
2.5°	1306.2	1303.6	1304.9	1300.1	1288.8	1276.8	1276.8	1263.9	1250.6	1237.1	1222.4
5°	1387.4	1383.4	1380.1	1365.2	1343.1	1318.4	1314.3	1288.8	1261.3	1233.8	1207.0
7.5°	1455.2	1451.1	1441.2	1414.2	1382.0	1345.1	1340.5	1306.9	1270.7	1232.5	1194.8
10°	1503.6	1500.8	1481.3	1447.1	1409.6	1366.0	1357.9	1323.7	1280.8	1233.2	1185.6
12.5°	1530.4	1526.3	1502.9	1462.6	1418.2	1374.0	1366.0	1333.1	1284.0	1231.8	1176.2
15°	1519.7	1517.5	1495.5	1454.5	1410.2	1372.0	1365.2	1331.7	1282.2	1227.1	1167.3
17.5°	1473.9	1478.7	1461.3	1420.9	1384.7	1357.9	1350.5	1319.0	1272.0	1215.6	1154.0
20°	1410.9	1416.3	1407.6	1366.6	1345.8	1328.5	1324.3	1298.9	1255.2	1198.9	1137.9
22.5°	1343.9	1348.5	1349.2	1310.9	1304.2	1297.5	1294.2	1276.0	1240.5	1188.8	1127.2
25°	1297.5	1302.9	1304.2	1270.7	1274.8	1276.8	1276.0	1263.2	1237.9	1188.8	1128.5
27.5°	1285.5	1288.1	1286.8	1255.9	1263.2	1274.8	1275.4	1272.7	1248.6	1202.2	1147.2
30°	1327.1	1328.5	1311.6	1265.4	1272.7	1287.5	1288.1	1286.8	1271.3	1237.1	1189.5
32.5°	1506.8	1505.5	1447.8	1328.5	1302.9	1308.2	1310.3	1322.3	1323.7	1294.8	1250.6
35°	1780.6	1779.9	1712.8	1508.9	1388.8	1360.7	1363.3	1382.0	1398.8	1379.3	1353.8
37.5°	2081.8	2083.8	2042.8	1766.4	1573.9	1456.5	1453.8	1467.9	1498.2	1504.8	1508.2
40°	2415.9	2426.1	2423.9	2062.4	1833.6	1620.3	1593.5	1577.3	1635.6	1672.6	1720.2
42.5°	2797.6	2794.9	2796.3	2387.1	2130.2	1877.8	1828.2	1753.0	1820.9	1884.6	1989.2
45°	3125.7	3136.4	3144.4	2732.6	2462.3	2172.5	2122.1	1985.3	2046.2	2141.5	2301.2
47.5°	3455.8	3437.1	3451.7	3116.9	2831.8	2508.4	2443.4	2258.9	2316.0	2450.1	2692.9
50°	3840.3	3831.5	3764.4	3618.8	3278.8	2849.3	2764.2	2544.7	2627.9	2807.1	3176.8
52.5°	4185.2	4138.1	4085.9	4013.4	3718.2	3194.2	3086.1	2842.0	2994.9	3217.0	3777.2
55°	4311.2	4279.6	4342.8	4436.6	4183.0	3545.7	3425.0	3188.9	3408.9	3685.9	4483.6
57.5°	4445.4	4456.1	4598.3	4788.2	4623.1	3920.7	3789.9	3599.4	3863.0	4210.5	5273.3
60°	4512.5	4555.5	4839.2	5195.4	5041.8	4332.0	4206.6	4070.9	4366.9	4790.2	6061.0
62.5°	4523.9	4581.5	4983.4	5338.4	5618.1	4962.0	4817.2	4670.2	4996.3	5431.0	6631.2
65°	4314.6	4403.1	4970.7	5514.2	6143.5	6014.6	5922.7	5666.5	5838.9	5995.2	6728.5
67.5°	3699.4	3796.0	4478.9	5441.8	6564.8	7106.9	7089.5	6711.1	6489.6	6213.2	6007.2
70°	2715.1	2793.0	3449.1	4652.1	6380.9	7964.3	7995.2	7388.0	6671.4	5750.3	4466.8
71°	2195.8	2263.0	2881.6	4130.0	6022.6	8008.6	8073.0	7418.2	6482.3	5332.2	3739.6
72.5°	1366.6	1404.2	1913.4	3116.9	5186.1	7552.3	7661.0	7031.8	5886.6	4507.2	2643.4
75°	515.9	530.7	709.8	1374.6	3095.5	5673.9	5805.3	5314.3	4135.4	2572.9	1106.4
77.5°	277.0	284.5	352.2	571.6	1240.5	3252.6	3421.6	3031.2	1983.8	900.3	452.1
80°	185.8	190.5	243.5	338.8	570.2	1238.6	1379.3	1217.1	742.7	513.9	322.0
82.5°	120.2	122.8	165.6	222.7	368.3	435.4	497.1	519.3	463.5	368.3	194.6
85°	79.2	81.1	109.4	142.2	228.1	214.7	220.1	287.7	316.1	242.8	99.4
87.5°	45.6	46.9	65.8	73.1	102.6	80.5	87.2	136.8	187.8	158.3	57.0
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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**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1231.0	1231.0	1231.0	1231.0	1231.0	1231.0	1231.0	1231.0	1231.0	1231.0	1231.0
2.5°	1215.6	1210.2	1198.2	1190.9	1187.5	1186.1	1184.9	1187.5	1187.5	1186.1	1183.4
5°	1193.6	1183.4	1163.3	1149.2	1141.8	1139.9	1142.6	1145.9	1147.9	1147.9	1145.9
7.5°	1177.4	1162.6	1135.8	1116.4	1104.9	1101.6	1109.0	1121.1	1129.1	1133.1	1133.8
10°	1164.1	1143.9	1114.3	1094.2	1084.9	1083.5	1092.9	1108.2	1125.0	1132.6	1133.8
12.5°	1151.9	1129.1	1096.9	1078.1	1071.4	1074.8	1087.6	1101.6	1121.1	1131.9	1132.6
15°	1140.6	1117.0	1082.8	1063.4	1062.1	1067.4	1079.5	1090.9	1105.6	1119.1	1119.1
17.5°	1127.2	1101.6	1066.1	1048.0	1048.0	1052.6	1060.7	1066.7	1076.1	1088.8	1088.1
20°	1111.1	1084.9	1048.6	1029.8	1025.9	1023.1	1023.1	1024.4	1032.5	1043.9	1045.9
22.5°	1098.9	1072.0	1033.9	1011.0	992.9	975.5	968.2	965.4	972.9	983.6	986.2
25°	1098.9	1072.0	1029.2	990.9	946.6	913.0	899.1	895.0	902.3	912.4	916.5
27.5°	1117.0	1090.3	1039.9	972.9	891.7	837.9	821.2	817.8	824.6	832.5	836.6
30°	1159.4	1133.1	1070.8	952.1	830.6	760.1	741.3	738.0	741.3	744.8	749.4
32.5°	1229.8	1207.6	1121.1	933.2	768.9	689.7	666.9	661.5	662.9	663.5	667.5
35°	1344.6	1334.4	1188.2	911.2	710.5	632.0	608.5	597.8	597.2	600.4	605.2
37.5°	1520.2	1526.3	1274.8	878.9	662.2	591.1	567.5	556.9	551.5	558.1	563.5
40°	1768.6	1782.5	1374.6	835.2	622.5	566.9	542.0	532.1	524.6	522.6	525.2
42.5°	2091.3	2087.2	1476.6	779.5	579.6	550.8	524.6	513.9	501.9	486.4	483.1
45°	2473.7	2415.9	1561.9	711.2	530.7	535.4	508.5	493.8	475.1	452.1	449.5
47.5°	2925.2	2766.2	1614.2	638.1	485.1	515.3	490.5	467.6	440.1	425.3	423.3
50°	3469.3	3176.0	1651.1	563.5	444.1	489.8	465.0	434.7	407.9	403.9	403.2
52.5°	4113.2	3659.8	1696.7	496.5	412.0	456.9	439.5	408.5	387.1	389.1	389.1
55°	4798.2	4160.3	1698.1	443.5	383.8	418.6	420.6	395.9	379.1	385.7	387.8
57.5°	5422.9	4597.6	1564.6	405.9	356.9	388.4	414.6	400.6	387.8	411.2	413.3
60°	5967.7	4934.5	1277.4	375.0	334.8	377.1	428.0	429.4	426.6	490.5	495.1
62.5°	6167.0	4937.9	907.1	348.9	322.8	383.8	456.2	458.2	458.2	517.2	526.0
65°	5887.9	4526.6	603.8	333.5	314.6	398.5	479.1	470.4	449.5	490.5	481.0
67.5°	4904.2	3523.6	441.4	323.4	303.3	399.1	499.2	477.0	441.4	476.3	460.2
70°	3370.6	2242.2	369.7	314.0	289.9	381.7	509.9	475.1	429.4	444.1	422.7
71°	2713.2	1789.3	350.9	310.6	284.5	371.7	511.2	472.2	423.3	432.8	413.3
72.5°	1787.3	1102.3	328.2	303.3	276.4	354.2	507.9	466.3	415.2	415.9	403.2
75°	705.1	456.9	295.3	286.5	253.6	326.1	493.1	453.6	399.8	386.5	381.2
77.5°	356.3	298.5	259.6	263.1	226.7	297.2	472.2	432.8	378.4	360.3	356.3
80°	260.2	226.7	222.2	228.1	196.5	269.0	446.2	404.5	350.9	369.7	361.6
82.5°	158.3	138.2	173.7	188.6	164.4	240.1	415.2	371.7	316.1	291.2	281.8
85°	75.2	81.1	125.5	138.9	121.5	191.9	379.8	335.4	275.7	238.2	242.3
87.5°	36.9	44.9	71.8	83.3	79.8	140.9	286.5	260.2	217.4	179.1	175.1
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)