

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: P198957

Luminaire Tested: **XNV2-AF-02-LED-U-T4W-7050-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198957  
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-7050-800  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV WIDE OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9628 lumens  
Efficiency: N/A  
Efficacy: 113.3 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): 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

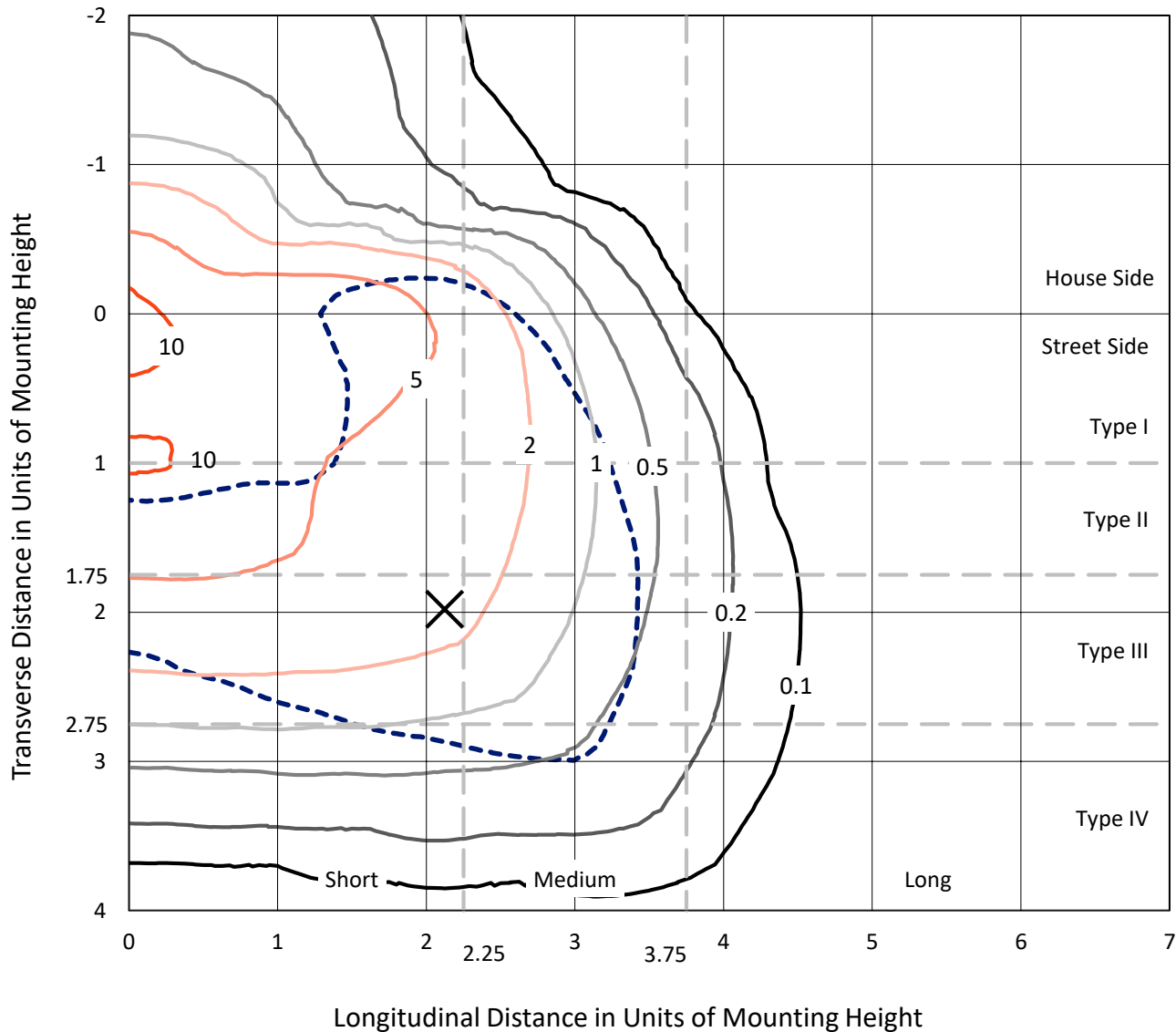


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### Iso-Footcandle Lines of Horizontal Illumination

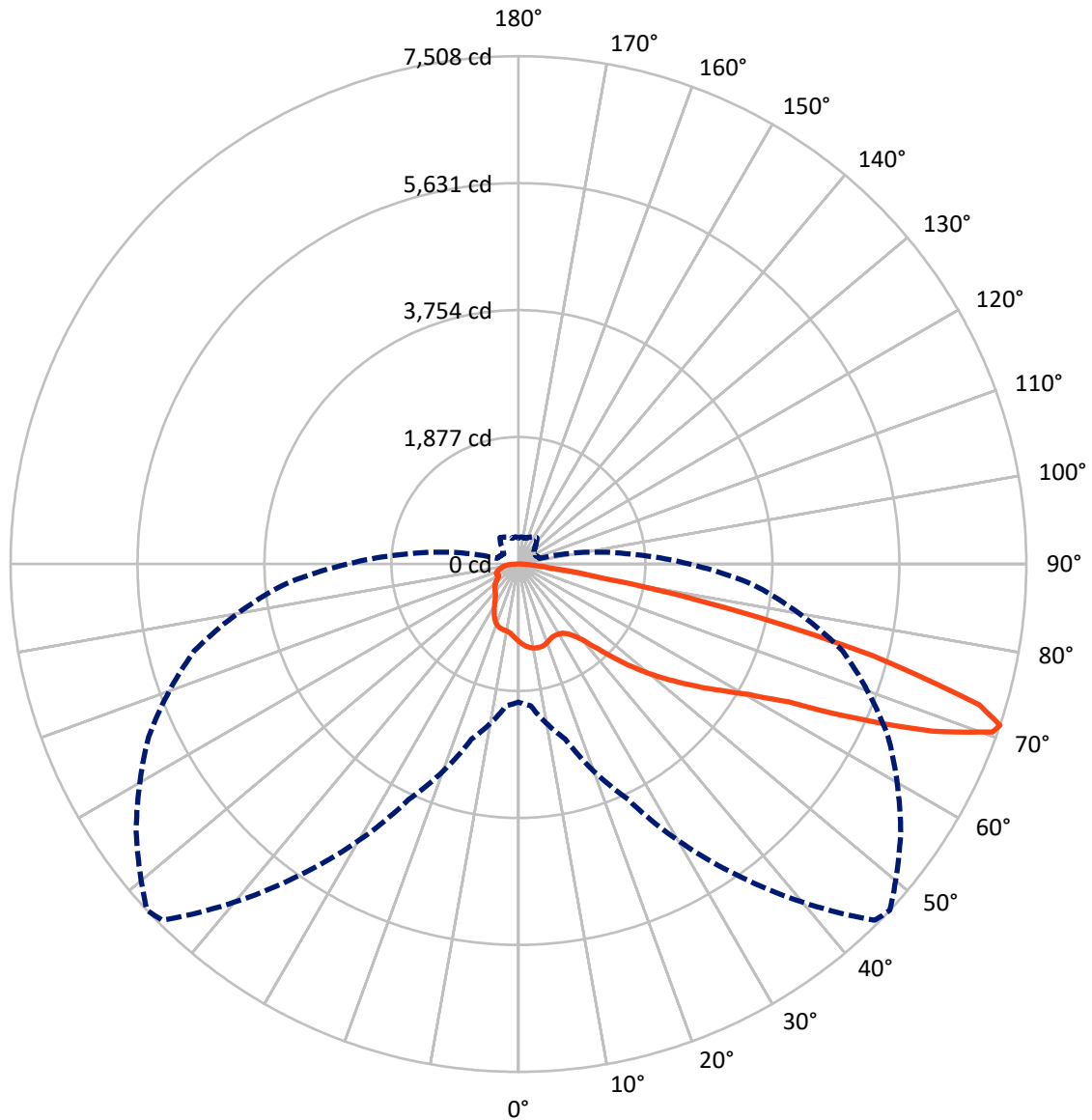
✕ Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.1 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	2063.4	0.0	2063.4
	% Fixture	21.4	0.0	21.4
<b>Street Side</b>	Lumens	7564.6	0.0	7564.6
	% Fixture	78.6	0.0	78.6
<b>Total</b>	Lumens	9628.0	0.0	9628.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	109.3	1.1
10°-20°	319.8	3.3
20°-30°	475.2	4.9
30°-40°	682.4	7.1
40°-50°	1209.9	12.6
50°-60°	2070.2	21.5
60°-70°	2939.0	30.5
70°-80°	1609.7	16.7
80°-90°	212.5	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°	9628.0	100.0
0°-180°	9628.0	100.0

**Coefficient of Utilization**



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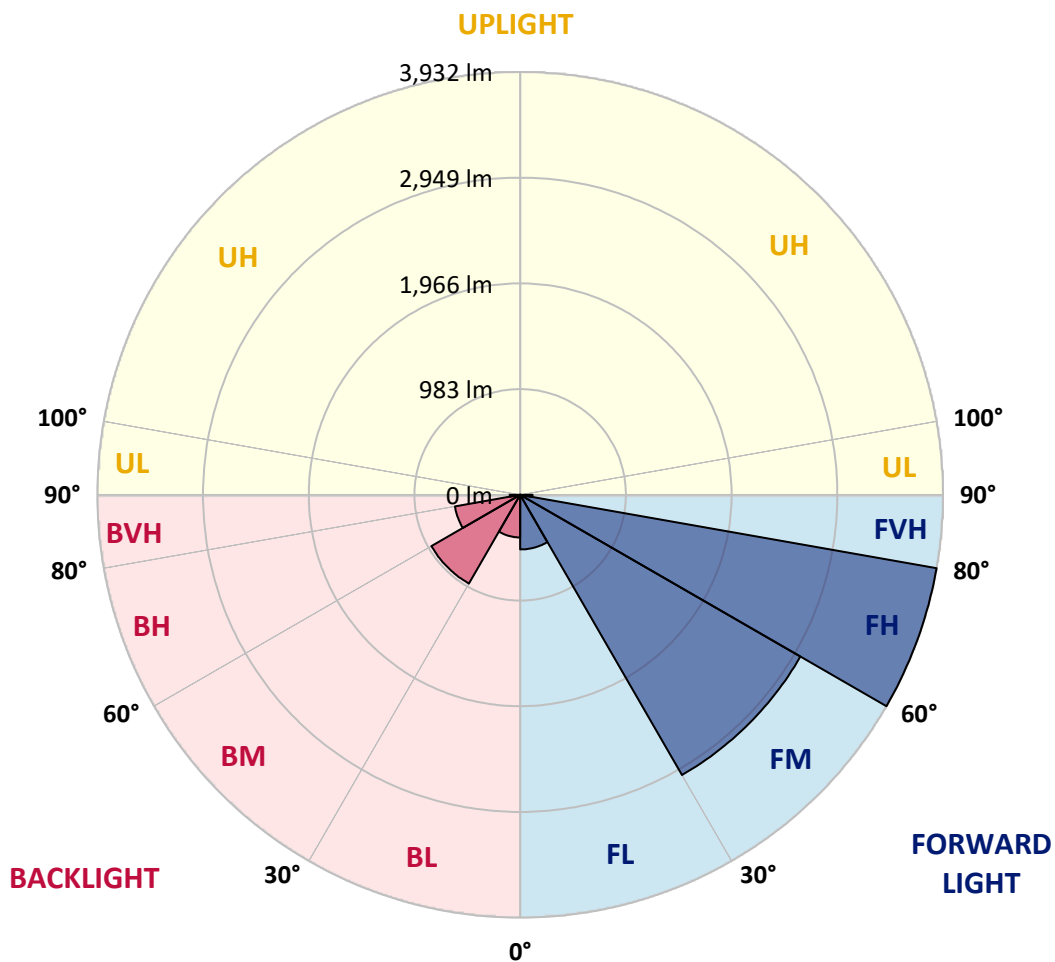
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	508.1	5.3			
FM	(30°-60°)	3009.0	31.3			
FH	(60°-80°)	3932.2	40.8			G2/5000
FVH	(80°-90°)	115.2	1.2			G2/225
BL	(0°-30°)	396.2	4.1	B1/500		
BM	(30°-60°)	953.4	9.9	B1/1000		
BH	(60°-80°)	616.5	6.4	B2/1000		G2/1000
BVH	(80°-90°)	97.2	1.0			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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	47°	55°	65°	75°	85°
0°	1144.9	1144.9	1144.9	1144.9	1144.9	1144.9	1144.9	1144.9	1144.9	1144.9	1144.9
2.5°	1214.8	1212.3	1213.6	1209.2	1198.6	1187.4	1187.4	1175.5	1163.0	1150.5	1136.8
5°	1290.3	1286.6	1283.4	1269.7	1249.1	1226.0	1222.3	1198.6	1173.0	1147.4	1122.5
7.5°	1353.3	1349.6	1340.2	1315.3	1285.3	1251.0	1246.6	1215.4	1181.7	1146.2	1111.2
10°	1398.3	1395.8	1377.7	1345.8	1310.9	1270.3	1262.9	1231.0	1191.1	1146.8	1102.5
12.5°	1423.2	1419.5	1397.6	1360.2	1319.0	1277.8	1270.3	1239.8	1194.2	1145.6	1093.8
15°	1413.2	1411.4	1390.8	1352.7	1311.5	1276.0	1269.7	1238.5	1192.3	1141.2	1085.7
17.5°	1370.8	1375.2	1358.9	1321.5	1287.8	1262.9	1256.0	1226.7	1183.0	1130.6	1073.2
20°	1312.1	1317.1	1309.0	1271.0	1251.6	1235.4	1231.7	1207.9	1167.4	1115.0	1058.2
22.5°	1249.8	1254.1	1254.7	1219.2	1212.9	1206.7	1203.6	1186.7	1153.7	1105.6	1048.2
25°	1206.7	1211.7	1212.9	1181.7	1185.5	1187.4	1186.7	1174.9	1151.2	1105.6	1049.5
27.5°	1195.5	1198.0	1196.7	1168.0	1174.9	1185.5	1186.1	1183.6	1161.2	1118.1	1066.9
30°	1234.2	1235.4	1219.8	1176.8	1183.6	1197.3	1198.0	1196.7	1182.4	1150.5	1106.2
32.5°	1401.4	1400.1	1346.5	1235.4	1211.7	1216.7	1218.6	1229.8	1231.0	1204.2	1163.0
35°	1655.9	1655.3	1592.9	1403.2	1291.6	1265.4	1267.8	1285.3	1300.9	1282.8	1259.1
37.5°	1936.1	1938.0	1899.9	1642.8	1463.8	1354.6	1352.1	1365.2	1393.3	1399.5	1402.6
40°	2246.8	2256.2	2254.3	1918.0	1705.2	1506.8	1481.9	1466.9	1521.2	1555.5	1599.8
42.5°	2601.8	2599.3	2600.6	2220.0	1981.0	1746.4	1700.2	1630.4	1693.4	1752.6	1850.0
45°	2906.9	2916.9	2924.4	2541.3	2289.9	2020.3	1973.5	1846.2	1903.0	1991.6	2140.1
47.5°	3213.9	3196.4	3210.2	2898.8	2633.7	2332.9	2272.4	2100.8	2153.8	2278.6	2504.5
50°	3571.4	3563.3	3500.9	3365.5	3049.2	2649.9	2570.6	2366.6	2444.0	2610.6	2954.4
52.5°	3892.1	3848.5	3799.8	3732.4	3457.9	2970.6	2870.1	2643.0	2785.3	2991.8	3512.8
55°	4009.4	3980.1	4038.8	4126.1	3890.3	3297.5	3185.2	2965.6	3170.2	3427.9	4169.8
57.5°	4134.2	4144.2	4276.5	4453.1	4299.6	3646.3	3524.6	3347.4	3592.6	3915.8	4904.2
60°	4196.6	4236.6	4500.5	4831.8	4688.9	4028.8	3912.1	3786.1	4061.2	4454.9	5636.7
62.5°	4207.2	4260.9	4634.6	4964.7	5224.9	4614.7	4479.9	4343.2	4646.5	5050.8	6167.0
65°	4012.6	4094.9	4622.8	5128.2	5713.4	5593.6	5508.1	5269.8	5430.2	5575.5	6257.5
67.5°	3440.4	3530.3	4165.4	5060.8	6105.3	6609.4	6593.2	6241.3	6035.4	5778.3	5586.8
70°	2525.1	2597.5	3207.7	4326.4	5934.3	7406.8	7435.5	6870.8	6204.5	5347.8	4154.2
71°	2042.2	2104.6	2679.8	3841.0	5601.1	7448.0	7507.9	6898.9	6028.5	4959.1	3477.8
72.5°	1271.0	1305.9	1779.5	2898.8	4823.1	7023.7	7124.8	6539.5	5474.5	4191.6	2458.3
75°	479.8	493.5	660.1	1278.5	2878.9	5276.7	5399.0	4942.2	3846.0	2392.8	1028.9
77.5°	257.7	264.6	327.6	531.6	1153.7	3024.9	3182.1	2819.0	1845.0	837.3	420.5
80°	172.8	177.2	226.5	315.1	530.3	1151.8	1282.8	1131.8	690.7	477.9	299.5
82.5°	111.7	114.2	154.1	207.1	342.5	404.9	462.3	482.9	431.1	342.5	180.9
85°	73.6	75.5	101.7	132.3	212.1	199.7	204.7	267.7	293.9	225.9	92.3
87.5°	42.4	43.7	61.1	68.0	95.5	74.9	81.1	127.3	174.7	147.2	53.0
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°	1144.9	1144.9	1144.9	1144.9	1144.9	1144.9	1144.9	1144.9	1144.9	1144.9	1144.9
2.5°	1130.6	1125.6	1114.4	1107.5	1104.4	1103.1	1101.9	1104.4	1104.4	1103.1	1100.6
5°	1110.0	1100.6	1081.9	1068.8	1061.9	1060.1	1062.6	1065.7	1067.6	1067.6	1065.7
7.5°	1095.0	1081.3	1056.3	1038.2	1027.6	1024.5	1031.4	1042.6	1050.1	1053.8	1054.5
10°	1082.5	1063.8	1036.4	1017.6	1008.9	1007.7	1016.4	1030.7	1046.3	1053.2	1054.5
12.5°	1071.3	1050.1	1020.1	1002.7	996.4	999.6	1011.4	1024.5	1042.6	1052.6	1053.2
15°	1060.7	1038.9	1007.0	988.9	987.7	992.7	1003.9	1014.5	1028.3	1040.7	1040.7
17.5°	1048.2	1024.5	991.4	974.6	974.6	979.0	986.4	992.1	1000.8	1012.7	1012.0
20°	1033.2	1008.9	975.2	957.7	954.0	951.5	951.5	952.8	960.2	970.9	972.7
22.5°	1022.0	997.1	961.5	940.3	923.4	907.2	900.3	897.9	904.7	914.7	917.2
25°	1022.0	997.1	957.1	921.6	880.4	849.2	836.1	832.3	839.2	848.6	852.3
27.5°	1038.9	1013.9	967.1	904.7	829.2	779.3	763.7	760.6	766.8	774.3	778.1
30°	1078.2	1053.8	995.8	885.4	772.4	706.9	689.5	686.3	689.5	692.6	696.9
32.5°	1143.7	1123.1	1042.6	867.9	715.0	641.4	620.2	615.2	616.5	617.1	620.8
35°	1250.4	1241.0	1105.0	847.3	660.8	587.8	565.9	555.9	555.3	558.4	562.8
37.5°	1413.8	1419.5	1185.5	817.4	615.8	549.7	527.9	517.9	512.9	519.1	524.1
40°	1644.7	1657.8	1278.5	776.8	579.0	527.2	504.1	494.8	487.9	486.0	488.5
42.5°	1944.8	1941.1	1373.3	725.0	539.1	512.3	487.9	477.9	466.7	452.4	449.2
45°	2300.5	2246.8	1452.5	661.4	493.5	497.9	472.9	459.2	441.7	420.5	418.0
47.5°	2720.4	2572.5	1501.2	593.4	451.1	479.2	456.1	434.9	409.3	395.6	393.7
50°	3226.4	2953.7	1535.5	524.1	413.0	455.5	432.4	404.3	379.4	375.6	375.0
52.5°	3825.4	3403.6	1577.9	461.7	383.1	424.9	408.7	380.0	360.0	361.9	361.9
55°	4462.4	3869.1	1579.2	412.4	356.9	389.3	391.2	368.1	352.5	358.8	360.6
57.5°	5043.3	4275.9	1455.0	377.5	331.9	361.3	385.6	372.5	360.6	382.5	384.3
60°	5549.9	4589.1	1188.0	348.8	311.3	350.7	398.1	399.3	396.8	456.1	460.5
62.5°	5735.3	4592.2	843.6	324.4	300.1	356.9	424.3	426.2	426.2	481.1	489.2
65°	5475.7	4209.7	561.5	310.1	292.6	370.6	445.5	437.4	418.0	456.1	447.4
67.5°	4561.0	3276.9	410.6	300.7	282.0	371.2	464.2	443.6	410.6	443.0	428.0
70°	3134.7	2085.2	343.8	292.0	269.5	355.0	474.2	441.7	399.3	413.0	393.1
71°	2523.2	1664.0	326.3	288.9	264.6	345.7	475.4	439.3	393.7	402.4	384.3
72.5°	1662.2	1025.1	305.1	282.0	257.1	329.4	472.3	433.6	386.2	386.8	375.0
75°	655.8	424.9	274.5	266.4	235.8	303.2	458.6	421.8	371.9	359.4	354.4
77.5°	331.3	277.7	241.5	244.6	210.9	276.4	439.3	402.4	351.9	335.1	331.3
80°	242.1	210.9	206.5	212.1	182.8	250.2	414.9	376.2	326.3	343.8	336.3
82.5°	147.2	128.5	161.6	175.3	152.9	223.4	386.2	345.7	293.9	270.8	262.1
85°	69.9	75.5	116.7	129.2	112.9	178.4	353.2	312.0	256.4	221.5	225.2
87.5°	34.3	41.8	66.8	77.4	74.2	131.0	266.4	242.1	202.2	166.6	162.8
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)