

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: P198797

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198797
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-800
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 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: 9849 lumens
Efficiency: N/A
Efficacy: 115.9 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

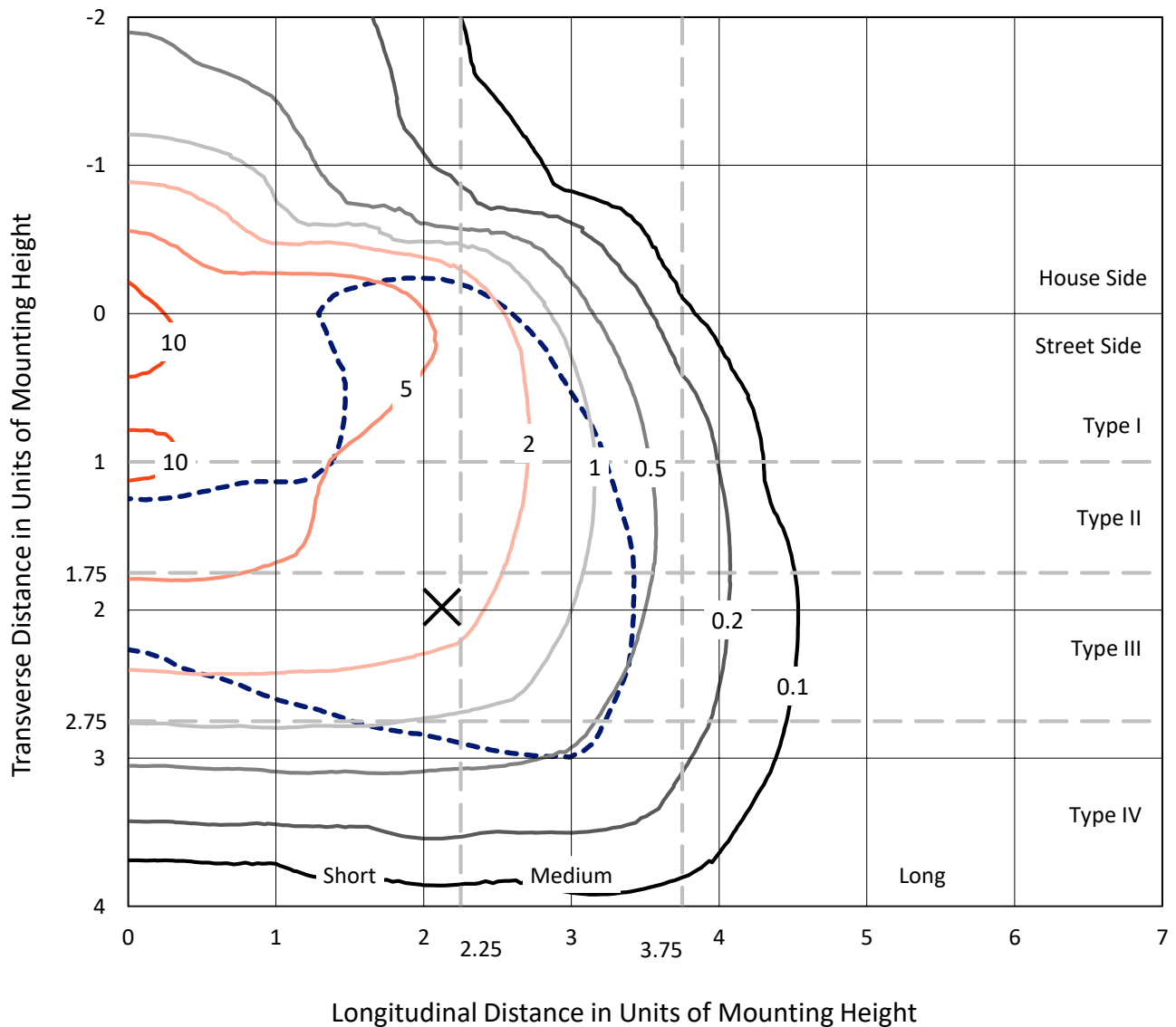
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

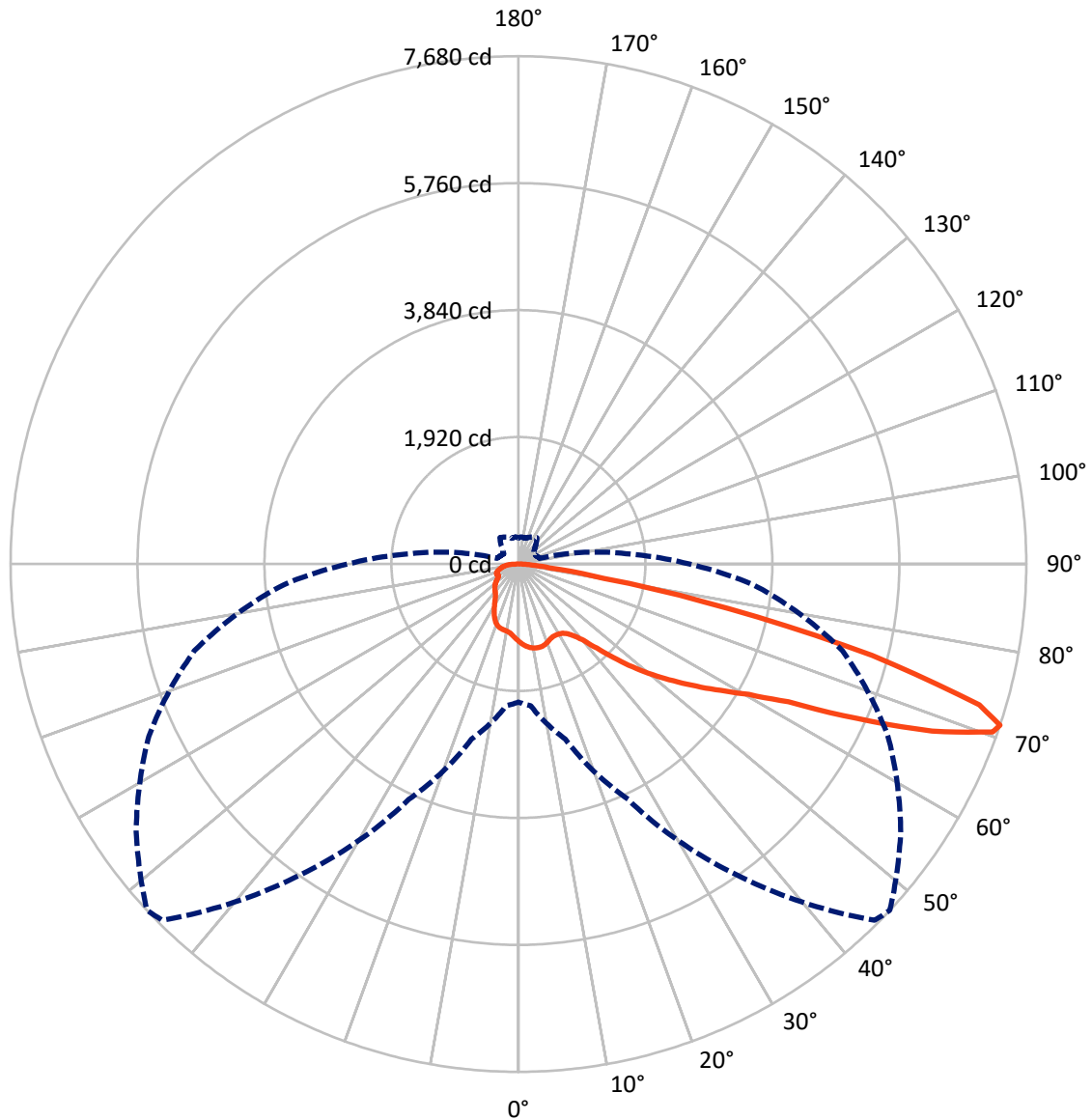
✕ Max cd
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 13.4 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
House Side	Lumens	2110.8	0.0	2110.8
	% Fixture	21.4	0.0	21.4
Street Side	Lumens	7738.2	0.0	7738.2
	% Fixture	78.6	0.0	78.6
Total	Lumens	9849.0	0.0	9849.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	111.8	1.1
10°-20°	327.2	3.3
20°-30°	486.1	4.9
30°-40°	698.0	7.1
40°-50°	1237.6	12.6
50°-60°	2117.7	21.5
60°-70°	3006.5	30.5
70°-80°	1646.6	16.7
80°-90°	217.4	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°	9849.0	100.0
0°-180°	9849.0	100.0



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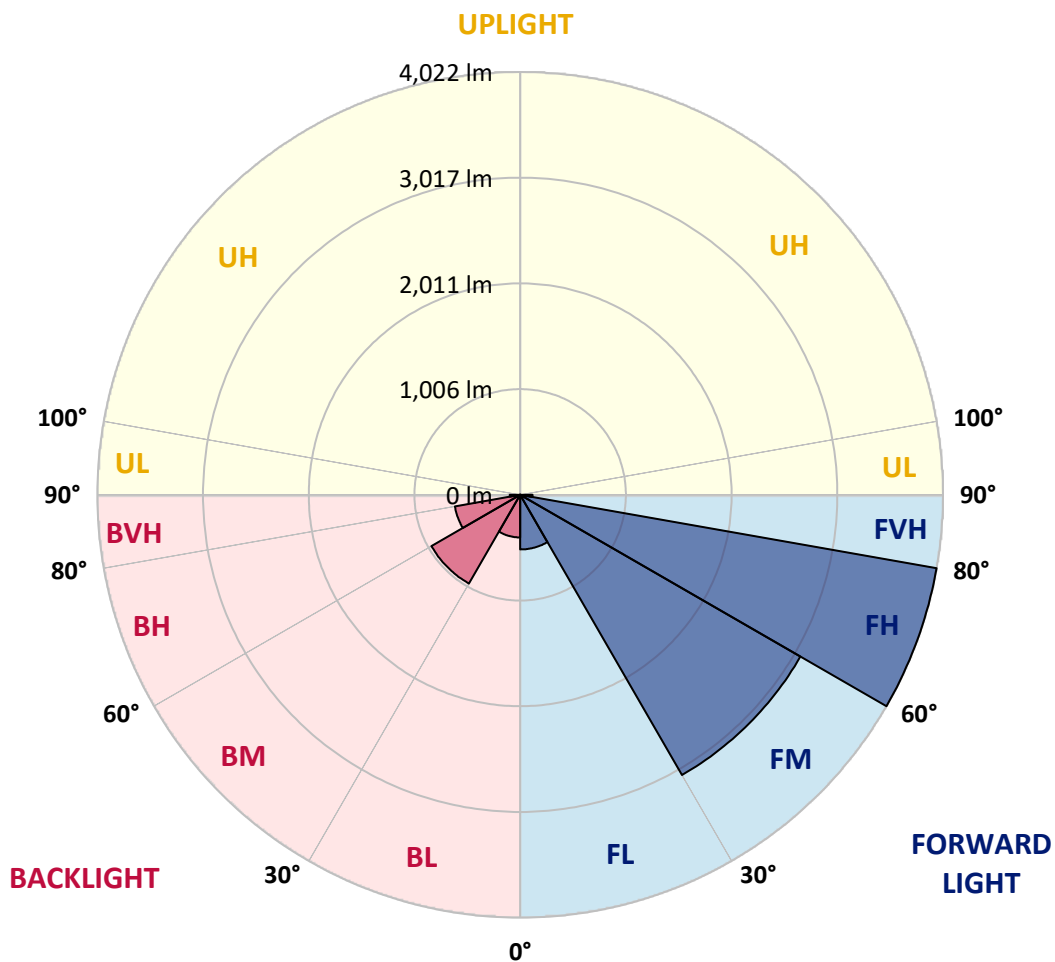
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	519.8	5.3			
FM	(30°-60°)	3078.1	31.3			
FH	(60°-80°)	4022.4	40.8			G2/5000
FVH	(80°-90°)	117.9	1.2			G2/225
BL	(0°-30°)	405.3	4.1	B1/500		
BM	(30°-60°)	975.3	9.9	B1/1000		
BH	(60°-80°)	630.7	6.4	B2/1000		G2/1000
BVH	(80°-90°)	99.5	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°	1171.2	1171.2	1171.2	1171.2	1171.2	1171.2	1171.2	1171.2	1171.2	1171.2	1171.2
2.5°	1242.7	1240.1	1241.5	1237.0	1226.1	1214.7	1214.7	1202.5	1189.7	1176.9	1162.9
5°	1319.9	1316.1	1312.9	1298.8	1277.8	1254.1	1250.4	1226.1	1199.9	1173.7	1148.3
7.5°	1384.4	1380.6	1371.0	1345.5	1314.8	1279.7	1275.2	1243.3	1208.8	1172.5	1136.7
10°	1430.4	1427.8	1409.3	1376.7	1341.0	1299.5	1291.9	1259.3	1218.4	1173.1	1127.8
12.5°	1455.9	1452.1	1429.7	1391.4	1349.3	1307.1	1299.5	1268.3	1221.6	1171.9	1118.9
15°	1445.6	1443.8	1422.7	1383.7	1341.6	1305.3	1298.8	1266.9	1219.7	1167.4	1110.6
17.5°	1402.3	1406.8	1390.1	1351.8	1317.4	1291.9	1284.8	1254.9	1210.2	1156.5	1097.8
20°	1342.2	1347.3	1339.0	1300.2	1280.3	1263.8	1260.0	1235.6	1194.2	1140.6	1082.5
22.5°	1278.5	1282.9	1283.5	1247.2	1240.7	1234.4	1231.2	1213.9	1180.2	1131.0	1072.3
25°	1234.4	1239.5	1240.7	1208.8	1212.7	1214.7	1213.9	1201.9	1177.6	1131.0	1073.6
27.5°	1222.9	1225.5	1224.2	1194.8	1201.9	1212.7	1213.3	1210.8	1187.9	1143.8	1091.4
30°	1262.5	1263.8	1247.8	1203.8	1210.8	1224.8	1225.5	1224.2	1209.5	1176.9	1131.6
32.5°	1433.6	1432.2	1377.4	1263.8	1239.5	1244.6	1246.6	1258.0	1259.3	1231.8	1189.7
35°	1693.9	1693.3	1629.5	1435.4	1321.2	1294.4	1296.9	1314.8	1330.8	1312.2	1288.0
37.5°	1980.5	1982.5	1943.5	1680.5	1497.4	1385.7	1383.1	1396.5	1425.3	1431.6	1434.8
40°	2298.4	2308.0	2306.0	1962.0	1744.3	1541.4	1515.9	1500.6	1556.1	1591.2	1636.5
42.5°	2661.5	2659.0	2660.3	2271.0	2026.5	1786.5	1739.2	1667.8	1732.3	1792.8	1892.5
45°	2973.6	2983.8	2991.5	2599.6	2342.5	2066.7	2018.8	1888.6	1946.7	2037.3	2189.2
47.5°	3287.7	3269.8	3283.9	2965.3	2694.1	2386.4	2324.6	2149.0	2203.2	2330.9	2562.0
50°	3653.4	3645.1	3581.2	3442.7	3119.2	2710.7	2629.6	2420.9	2500.1	2670.5	3022.2
52.5°	3981.4	3936.8	3887.0	3818.1	3537.3	3038.8	2936.0	2703.7	2849.2	3060.5	3593.4
55°	4101.4	4071.4	4131.5	4220.8	3979.6	3373.2	3258.3	3033.7	3243.0	3506.6	4265.5
57.5°	4229.1	4239.3	4374.6	4555.3	4398.3	3730.0	3605.5	3424.2	3675.1	4005.7	5016.8
60°	4292.9	4333.8	4603.8	4942.7	4796.5	4121.3	4001.9	3873.0	4154.4	4557.1	5766.1
62.5°	4303.8	4358.7	4741.0	5078.6	5344.8	4720.6	4582.7	4442.9	4753.1	5166.7	6308.5
65°	4104.7	4188.9	4728.9	5245.9	5844.5	5722.0	5634.5	5390.7	5554.8	5703.5	6401.1
67.5°	3519.4	3611.3	4261.0	5176.9	6245.4	6761.1	6744.5	6384.5	6173.9	5910.9	5715.0
70°	2583.1	2657.1	3281.3	4425.7	6070.5	7576.8	7606.2	7028.5	6346.9	5470.5	4249.5
71°	2089.1	2152.9	2741.3	3929.2	5729.6	7618.9	7680.2	7057.2	6166.9	5072.9	3557.6
72.5°	1300.2	1335.9	1820.3	2965.3	4933.8	7184.9	7288.3	6689.6	5600.1	4287.8	2514.7
75°	490.8	504.8	675.2	1307.8	2945.0	5397.8	5522.9	5055.6	3934.3	2447.7	1052.5
77.5°	263.6	270.7	335.1	543.8	1180.2	3094.3	3255.1	2883.7	1887.3	856.5	430.2
80°	176.8	181.3	231.7	322.3	542.5	1178.2	1312.2	1157.8	706.6	488.9	306.4
82.5°	114.3	116.8	157.6	211.9	350.4	414.2	472.9	494.0	441.0	350.4	185.1
85°	75.3	77.2	104.0	135.3	217.0	204.3	209.4	273.8	300.6	231.1	94.4
87.5°	43.4	44.7	62.5	69.6	97.7	76.6	83.0	130.2	178.7	150.6	54.2
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°	1171.2	1171.2	1171.2	1171.2	1171.2	1171.2	1171.2	1171.2	1171.2	1171.2	1171.2
2.5°	1156.5	1151.4	1140.0	1132.9	1129.7	1128.4	1127.2	1129.7	1129.7	1128.4	1125.9
5°	1135.5	1125.9	1106.7	1093.3	1086.3	1084.4	1087.0	1090.2	1092.1	1092.1	1090.2
7.5°	1120.1	1106.1	1080.5	1062.0	1051.2	1048.0	1055.1	1066.5	1074.2	1078.0	1078.7
10°	1107.3	1088.2	1060.2	1041.0	1032.1	1030.8	1039.7	1054.4	1070.3	1077.4	1078.7
12.5°	1095.9	1074.2	1043.5	1025.7	1019.3	1022.5	1034.6	1048.0	1066.5	1076.8	1077.4
15°	1085.0	1062.7	1030.1	1011.6	1010.4	1015.5	1026.9	1037.8	1051.9	1064.6	1064.6
17.5°	1072.3	1048.0	1014.2	997.0	997.0	1001.5	1009.0	1014.9	1023.8	1035.9	1035.2
20°	1056.9	1032.1	997.6	979.7	975.9	973.3	973.3	974.7	982.2	993.2	995.0
22.5°	1045.5	1020.0	983.6	961.9	944.6	928.0	921.0	918.5	925.5	935.7	938.3
25°	1045.5	1020.0	979.1	942.8	900.6	868.7	855.3	851.4	858.5	868.1	871.9
27.5°	1062.7	1037.2	989.3	925.5	848.2	797.2	781.2	778.1	784.4	792.1	796.0
30°	1102.9	1078.0	1018.7	905.7	790.1	723.1	705.3	702.1	705.3	708.5	712.9
32.5°	1169.9	1148.9	1066.5	887.8	731.4	656.1	634.4	629.3	630.6	631.3	635.0
35°	1279.1	1269.5	1130.4	866.7	676.0	601.3	578.9	568.7	568.0	571.2	575.7
37.5°	1446.2	1452.1	1212.7	836.2	629.9	562.3	540.0	529.8	524.7	531.0	536.1
40°	1682.4	1695.8	1307.8	794.6	592.3	539.3	515.7	506.2	499.1	497.2	499.7
42.5°	1989.4	1985.6	1404.8	741.6	551.5	524.1	499.1	488.9	477.4	462.8	459.5
45°	2353.3	2298.4	1485.8	676.6	504.8	509.3	483.8	469.7	451.8	430.2	427.6
47.5°	2782.8	2631.5	1535.7	607.0	461.5	490.2	466.6	444.9	418.7	404.7	402.7
50°	3300.4	3021.5	1570.7	536.1	422.5	466.0	442.3	413.6	388.1	384.2	383.6
52.5°	3913.2	3481.7	1614.1	472.3	391.9	434.7	418.1	388.7	368.3	370.2	370.2
55°	4564.8	3957.9	1615.4	421.9	365.1	398.2	400.2	376.5	360.6	367.0	368.9
57.5°	5159.0	4374.0	1488.4	386.2	339.5	369.6	394.4	381.0	368.9	391.3	393.1
60°	5677.3	4694.4	1215.3	356.8	318.4	358.7	407.2	408.5	405.9	466.6	471.1
62.5°	5866.9	4697.6	863.0	331.8	307.0	365.1	434.0	436.0	436.0	492.1	500.4
65°	5601.4	4306.3	574.4	317.2	299.3	379.1	455.7	447.4	427.6	466.6	457.7
67.5°	4665.7	3352.1	420.0	307.6	288.5	379.7	474.9	453.8	420.0	453.2	437.8
70°	3206.6	2133.1	351.7	298.7	275.7	363.1	485.1	451.8	408.5	422.5	402.1
71°	2581.1	1702.2	333.8	295.5	270.7	353.6	486.3	449.4	402.7	411.6	393.1
72.5°	1700.3	1048.6	312.1	288.5	263.0	337.0	483.1	443.6	395.1	395.7	383.6
75°	670.9	434.7	280.8	272.5	241.2	310.2	469.1	431.5	380.4	367.6	362.5
77.5°	338.9	284.1	247.0	250.2	215.7	282.7	449.4	411.6	360.0	342.8	338.9
80°	247.7	215.7	211.2	217.0	187.0	255.9	424.4	384.8	333.8	351.7	344.0
82.5°	150.6	131.4	165.3	179.3	156.4	228.5	395.1	353.6	300.6	277.0	268.1
85°	71.5	77.2	119.4	132.2	115.5	182.5	361.3	319.2	262.3	226.6	230.4
87.5°	35.1	42.8	68.3	79.2	75.9	134.0	272.5	247.7	206.8	170.4	166.5
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)