

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: P198781

Luminaire Tested: **XNV2-AF-02-LED-U-T3R-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198781
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24250)
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-T3R-800
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 10136.4 lumens
Efficiency: N/A
Efficacy: 119.3 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium - Full Cutoff
BUG Rating: B1 - U0 - G2

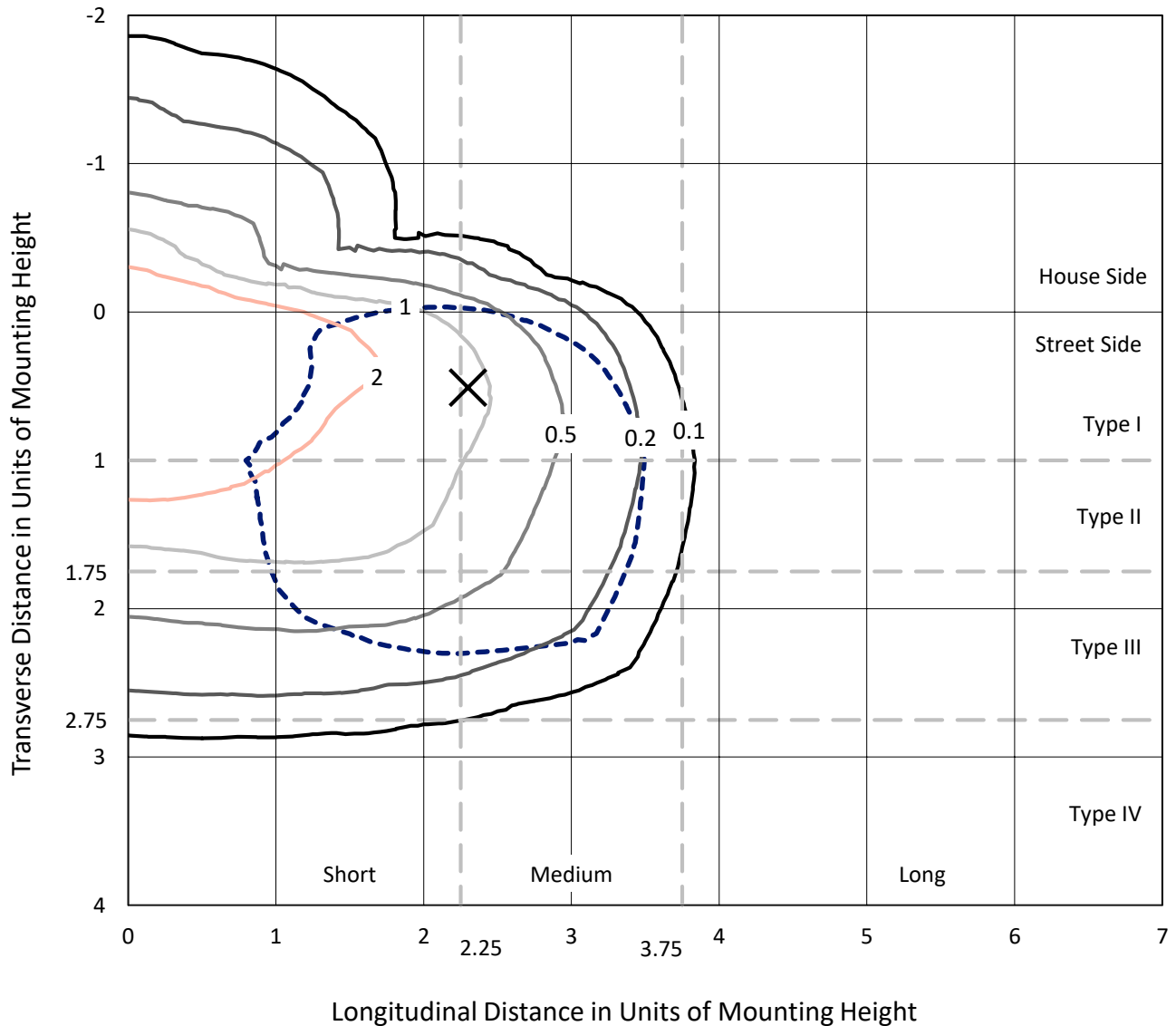
Input Watts (W): 85
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

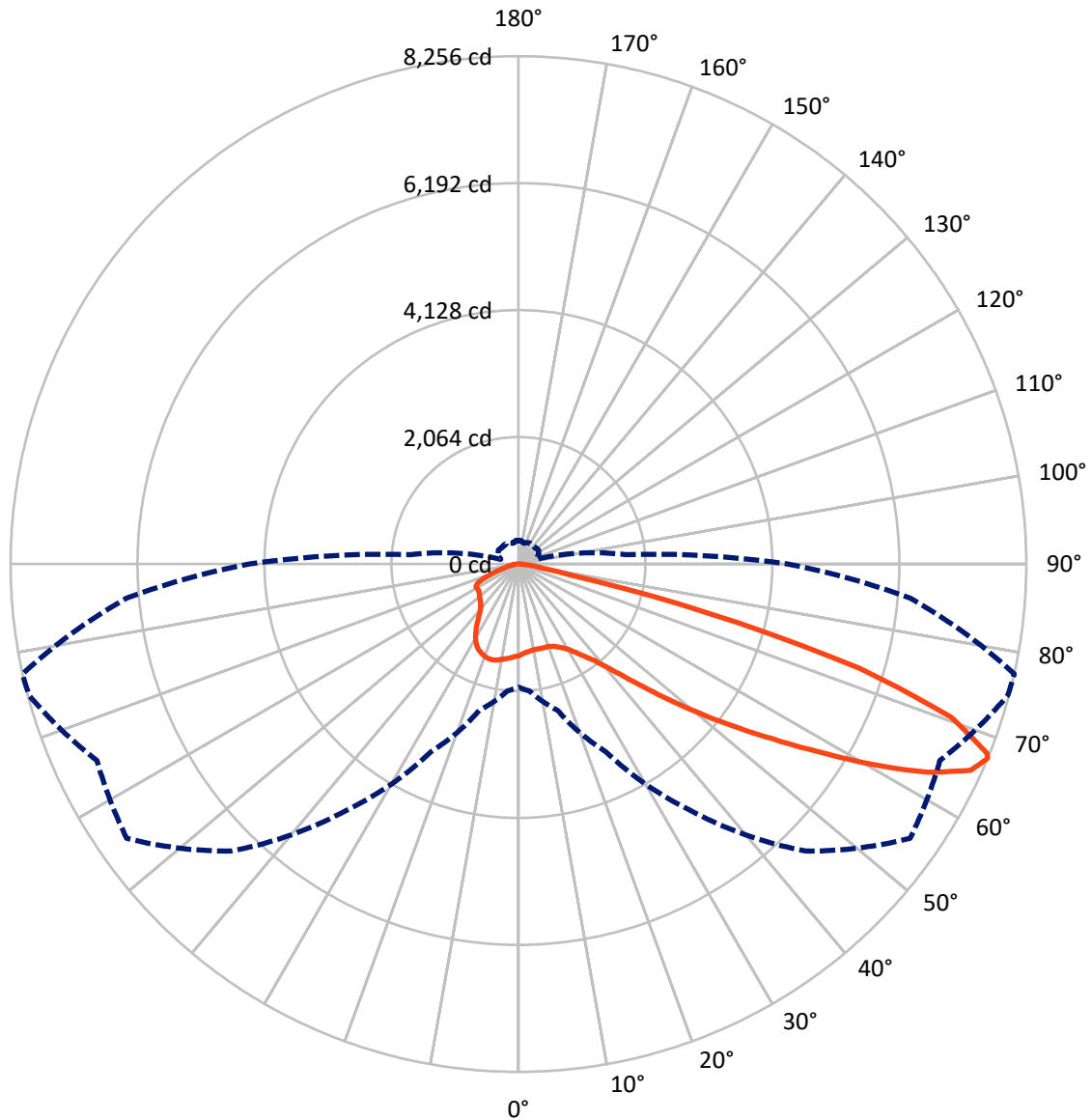
✕ Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 4.5 fc
 Type III - Medium - Full Cutoff

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Luminous Intensity Polar Plot



— Vertical Plane Through 77.5-Deg Lateral - - - Horizontal Cone Through 67-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1741.9	0.0	1741.9
	% Fixture	17.2	0.0	17.2
Street Side	Lumens	8394.5	0.0	8394.5
	% Fixture	82.8	0.0	82.8
Total	Lumens	10136.4	0.0	10136.4
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	132.9	1.3
10°-20°	368.0	3.6
20°-30°	625.2	6.2
30°-40°	1000.2	9.9
40°-50°	1539.8	15.2
50°-60°	2136.3	21.1
60°-70°	2849.6	28.1
70°-80°	1356.1	13.4
80°-90°	128.4	1.3
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°	10136.4	100.0
0°-180°	10136.4	100.0

Coefficient of Utilization



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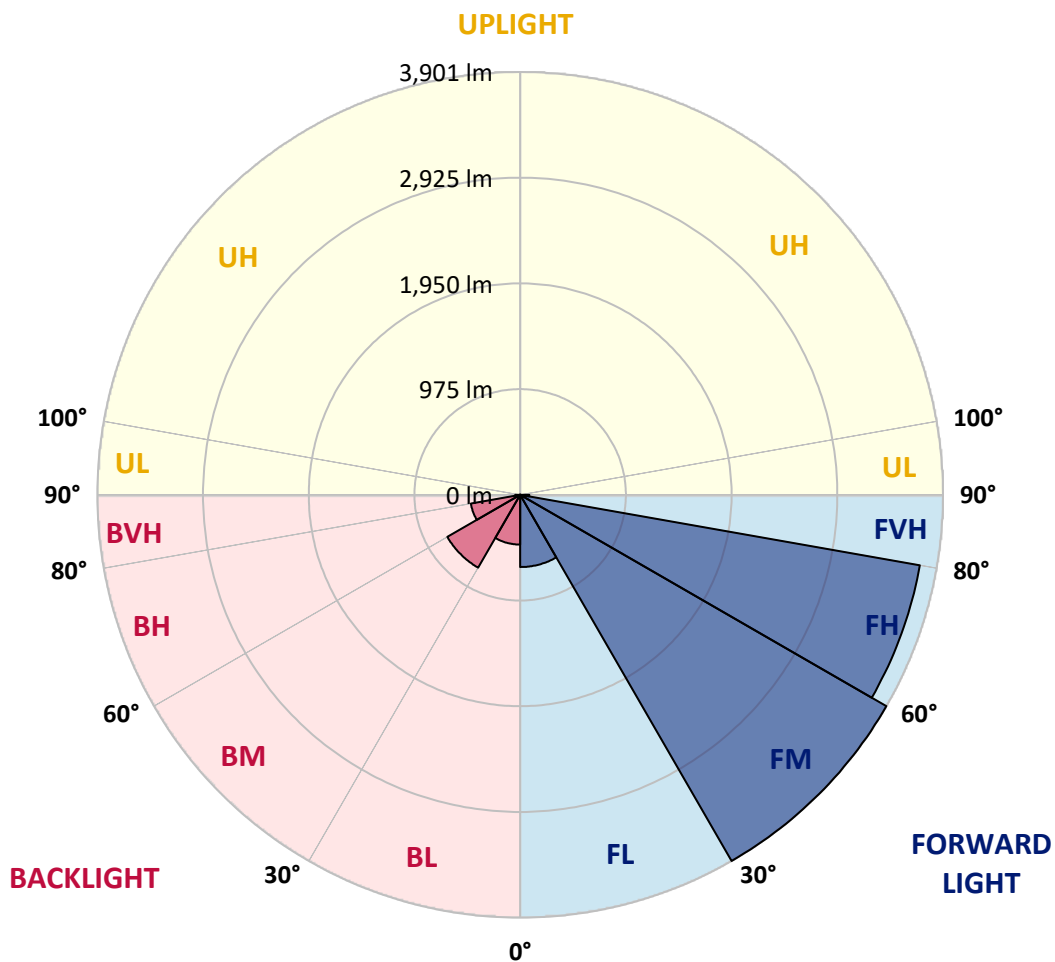
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	666.6	6.6			
FM	(30°-60°)	3900.6	38.5			
FH	(60°-80°)	3743.9	36.9			G2/5000
FVH	(80°-90°)	83.4	0.8			G1/100
BL	(0°-30°)	459.5	4.5	B1/500		
BM	(30°-60°)	775.6	7.7	B1/1000		
BH	(60°-80°)	461.9	4.6	B1/500		G1/500
BVH	(80°-90°)	45.0	0.4			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 III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77.5°	85°
0°	1491.8	1491.8	1491.8	1491.8	1491.8	1491.8	1491.8	1491.8	1491.8	1491.8	1491.8
2.5°	1337.7	1344.0	1344.6	1362.8	1370.9	1391.5	1414.1	1434.2	1451.7	1458.0	1469.3
5°	1203.6	1203.6	1205.4	1217.4	1240.5	1273.8	1320.7	1372.2	1426.0	1439.2	1472.4
7.5°	1133.4	1134.7	1135.9	1147.9	1166.0	1195.4	1242.5	1312.7	1402.3	1424.2	1482.5
10°	1139.7	1137.8	1131.6	1129.0	1136.6	1155.3	1196.0	1268.2	1382.2	1416.0	1500.6
12.5°	1238.1	1234.3	1213.6	1183.6	1155.9	1149.1	1177.3	1245.5	1372.8	1416.0	1531.3
15°	1406.6	1409.1	1368.4	1305.7	1233.7	1184.8	1181.0	1237.5	1369.6	1419.8	1567.0
17.5°	1625.9	1627.1	1570.7	1479.9	1360.2	1259.4	1206.8	1237.5	1369.6	1423.5	1601.4
20°	1859.0	1850.2	1786.3	1672.2	1516.8	1362.8	1253.7	1244.9	1373.4	1429.2	1634.1
22.5°	2058.9	2050.7	1983.7	1864.0	1686.0	1484.9	1317.0	1270.0	1394.1	1452.4	1679.8
25°	2233.6	2238.6	2173.5	2038.8	1854.6	1622.8	1411.6	1327.7	1437.3	1494.3	1736.2
27.5°	2446.1	2436.7	2361.5	2233.0	2028.1	1765.6	1530.0	1400.3	1488.7	1545.1	1805.1
30°	2691.7	2687.3	2585.8	2453.5	2219.2	1925.4	1647.2	1478.7	1555.7	1614.6	1891.5
32.5°	2989.9	2989.3	2880.2	2718.0	2434.1	2105.8	1785.7	1585.8	1653.5	1713.0	2006.2
35°	3327.6	3326.9	3214.2	2999.9	2681.7	2305.7	1948.6	1716.1	1774.4	1837.0	2142.8
37.5°	3561.9	3558.1	3499.3	3291.2	2955.4	2538.1	2152.2	1891.5	1911.6	1981.8	2307.6
40°	3607.0	3629.6	3680.4	3557.5	3254.3	2796.3	2356.5	2080.2	2098.9	2189.1	2514.9
42.5°	3558.1	3587.6	3756.2	3790.6	3553.1	3109.0	2612.1	2341.4	2365.3	2477.4	2758.7
45°	3515.6	3541.3	3752.4	3919.7	3848.2	3449.8	2931.0	2660.3	2705.4	2844.5	3036.9
47.5°	3442.8	3466.7	3678.4	3942.9	4016.8	3778.1	3315.1	3043.8	3121.4	3290.0	3353.9
50°	3439.2	3449.8	3577.6	3865.2	4075.1	4027.5	3740.5	3492.4	3611.4	3805.7	3704.8
52.5°	3343.9	3418.5	3534.4	3741.1	4076.4	4172.8	4159.6	3984.2	4167.8	4382.7	4089.5
55°	2761.3	2847.1	3390.3	3680.4	4068.8	4297.5	4542.5	4507.4	4794.4	5020.5	4520.5
57.5°	2578.2	2614.6	2974.2	3698.5	4131.5	4503.6	4925.3	5069.4	5511.1	5758.0	5037.4
60°	2528.1	2566.4	2890.9	3707.3	4301.3	4879.0	5444.8	5704.1	6353.9	6615.7	5624.5
62.5°	2472.4	2521.9	2897.2	3715.5	4599.5	5434.0	6133.9	6392.7	7219.1	7452.8	6174.6
65°	2309.4	2375.3	2781.3	3664.1	4925.9	6130.7	7045.0	7110.7	7934.0	8082.5	6506.7
67°	2000.6	2072.6	2463.0	3367.0	4895.8	6600.1	7773.6	7559.9	8237.9	8256.0	6399.0
67.5°	1902.8	1977.4	2355.2	3243.7	4810.0	6661.5	7902.7	7622.0	8235.4	8215.3	6298.7
70°	1281.2	1365.2	1667.9	2381.5	3858.3	6199.7	7871.3	7430.9	7695.2	7465.3	5411.5
72.5°	636.0	638.4	832.1	1304.5	2337.6	4446.7	6566.2	6356.9	6238.0	5803.7	3971.1
75°	306.4	312.0	392.8	576.4	985.6	2295.7	4478.0	4289.3	3652.1	3162.1	1987.4
77.5°	233.7	239.4	305.1	375.3	411.0	748.7	2218.0	1792.5	1058.2	845.3	560.2
80°	180.4	191.1	257.5	288.2	271.9	300.1	697.3	548.8	411.6	377.8	277.5
82.5°	141.0	147.2	218.7	218.7	187.9	201.1	324.6	317.0	255.6	230.6	149.1
85°	99.6	112.1	176.0	162.9	123.5	124.7	194.3	186.1	131.6	105.9	58.3
87.5°	44.5	57.0	125.3	106.5	65.8	50.7	79.6	68.3	52.0	40.1	26.9
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°	1491.8	1491.8	1491.8	1491.8	1491.8	1491.8	1491.8	1491.8	1491.8	1491.8	1491.8
2.5°	1481.7	1491.8	1507.5	1516.8	1529.4	1534.4	1539.4	1548.2	1555.1	1553.2	1550.1
5°	1495.6	1512.5	1531.9	1538.2	1538.2	1531.9	1528.2	1528.8	1526.9	1525.6	1521.8
7.5°	1515.6	1538.8	1552.6	1546.3	1526.9	1502.5	1479.3	1465.5	1452.4	1444.2	1446.7
10°	1543.8	1569.5	1570.1	1542.6	1496.2	1443.0	1397.2	1367.8	1339.6	1327.1	1330.8
12.5°	1584.6	1610.2	1588.3	1528.8	1447.4	1364.0	1280.0	1219.3	1164.7	1151.6	1147.9
15°	1628.4	1648.5	1599.6	1499.3	1377.2	1239.9	1099.0	1008.1	947.4	936.7	932.9
17.5°	1666.6	1677.9	1594.0	1446.7	1266.2	1050.1	886.0	824.5	812.0	818.3	818.3
20°	1700.5	1696.7	1569.5	1365.2	1091.5	839.5	744.3	743.7	760.7	776.3	777.5
22.5°	1743.1	1713.6	1530.6	1244.3	882.8	700.5	684.1	700.5	719.2	736.8	738.7
25°	1793.8	1732.4	1478.7	1072.1	709.9	636.0	642.8	656.6	668.5	682.3	682.9
27.5°	1844.6	1746.8	1405.3	869.6	615.9	594.6	602.1	607.7	610.9	619.7	619.7
30°	1903.5	1758.1	1299.5	696.7	572.6	558.2	553.8	551.4	553.8	565.8	566.4
32.5°	1977.4	1778.2	1154.7	597.7	552.6	532.5	510.0	497.5	506.3	527.5	531.3
35°	2061.3	1801.9	981.2	558.2	545.7	520.1	478.6	459.3	462.4	481.8	485.0
37.5°	2166.6	1832.6	810.2	548.8	552.6	518.7	464.3	436.7	422.9	423.5	422.9
40°	2301.3	1863.4	674.8	551.4	567.6	521.9	457.4	414.2	385.3	386.6	389.1
42.5°	2442.3	1883.5	588.9	558.8	585.8	526.3	454.9	392.2	367.1	388.4	407.9
45°	2607.1	1877.7	544.5	565.8	599.7	528.1	445.5	389.7	369.1	432.9	469.3
47.5°	2796.3	1853.4	519.5	568.9	603.3	527.5	438.5	397.8	384.7	495.6	536.9
50°	3001.8	1815.1	499.4	563.9	601.5	525.1	446.1	407.9	391.0	509.4	541.3
52.5°	3226.7	1780.0	478.6	552.6	592.1	517.5	455.5	403.5	373.4	469.3	493.7
55°	3493.0	1771.9	455.5	533.2	576.4	509.4	450.5	389.7	354.0	416.0	431.1
57.5°	3797.5	1822.6	425.4	509.4	555.2	493.1	438.5	382.2	347.1	378.4	386.6
60°	4184.1	1934.8	393.4	484.4	528.8	468.6	427.9	384.1	349.0	372.8	374.7
62.5°	4486.0	2035.7	364.7	453.6	493.7	439.3	416.6	386.0	354.7	380.3	377.2
65°	4595.7	1986.2	329.0	407.9	444.3	406.6	401.0	387.2	354.7	384.7	377.8
67°	4370.8	1750.0	295.1	362.1	397.2	377.8	386.0	382.2	348.3	384.1	372.1
67.5°	4263.7	1666.6	286.3	354.7	384.7	369.1	382.2	379.7	346.5	382.8	369.1
70°	3516.2	1195.4	241.8	297.6	322.0	325.2	359.1	363.4	331.4	359.7	334.6
72.5°	2501.8	748.1	208.7	230.6	260.0	278.1	327.7	341.5	311.4	312.6	292.0
75°	1238.1	401.6	186.1	177.9	202.3	231.8	285.7	311.4	281.9	260.6	253.8
77.5°	417.9	227.4	157.2	143.5	157.2	186.1	236.8	271.9	248.8	220.5	216.1
80°	216.1	165.4	122.8	115.3	124.1	144.1	185.5	226.2	212.4	213.7	176.0
82.5°	134.7	100.9	88.4	87.7	94.0	110.3	136.6	183.6	182.3	156.0	113.4
85°	62.6	58.3	56.4	58.3	60.1	62.6	89.0	130.9	138.5	84.0	74.6
87.5°	26.3	25.7	22.5	24.4	26.9	26.3	35.7	55.8	77.6	52.6	48.3
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)