

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: P271351

Luminaire Tested: **XNV2-AF-02-LED-U-T3R-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271351
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-7027-800
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 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: 8608.6 lumens
Efficiency: N/A
Efficacy: 101.3 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

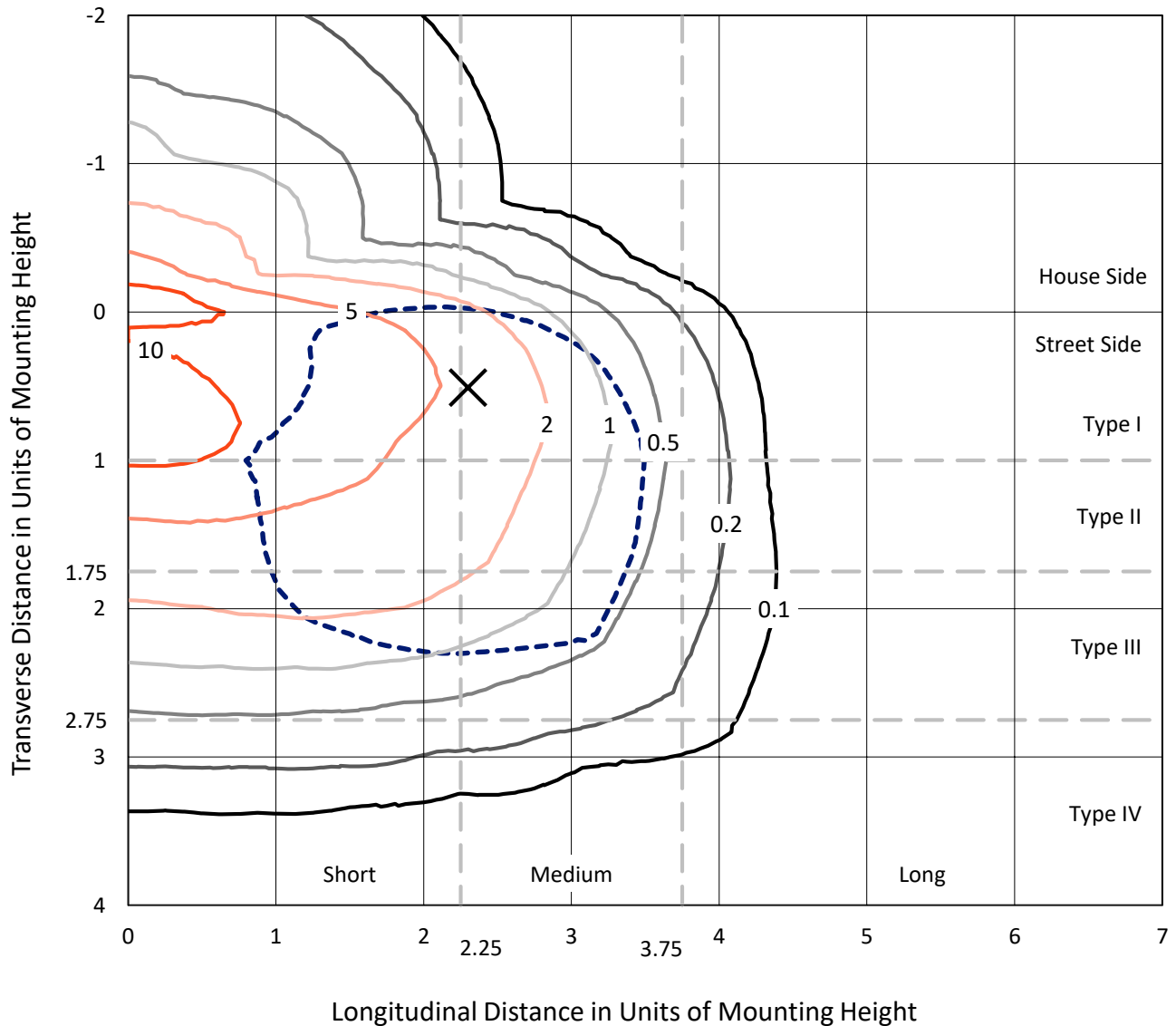


REPORT NUMBER: P271351

CATALOG NUMBER: XNV2-AF-02-LED-U-T3R-7027-800

Iso-Footcandle Lines of Horizontal Illumination

× Max cd
 - - - 1/2 Max cd

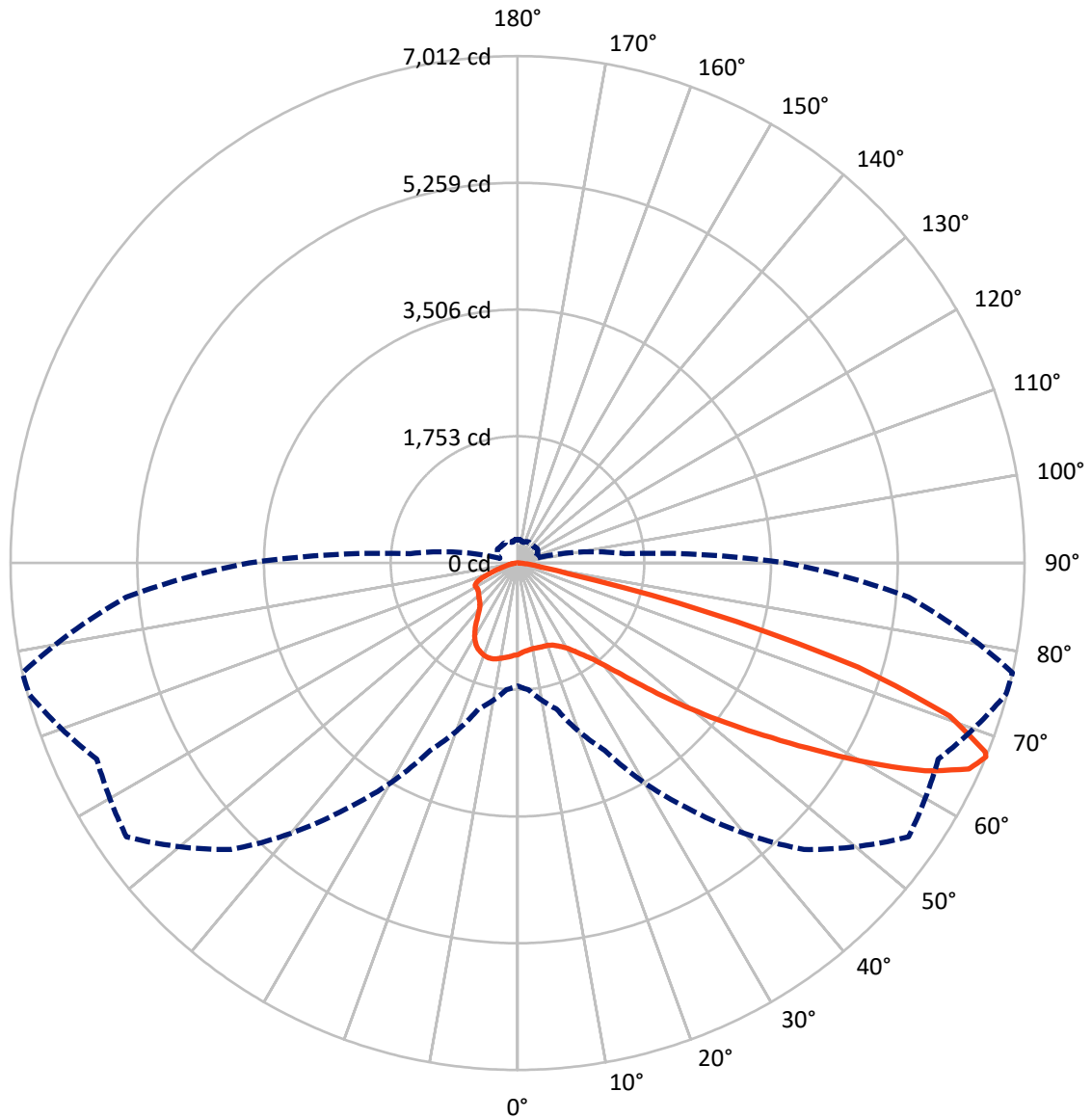


Based on 10 foot mounting height. Maximum calculated value = 15.2 fc
 Type III - Medium - Full Cutoff

REPORT NUMBER: P271351

CATALOG NUMBER: XNV2-AF-02-LED-U-T3R-7027-800

Luminous Intensity Polar Plot



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

REPORT NUMBER: P271351

CATALOG NUMBER: XNV2-AF-02-LED-U-T3R-7027-800

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1479.4	0.0	1479.4
	% Fixture	17.2	0.0	17.2
Street Side	Lumens	7129.2	0.0	7129.2
	% Fixture	82.8	0.0	82.8
Total	Lumens	8608.6	0.0	8608.6
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	112.8	1.3
10°-20°	312.5	3.6
20°-30°	531.0	6.2
30°-40°	849.4	9.9
40°-50°	1307.7	15.2
50°-60°	1814.3	21.1
60°-70°	2420.1	28.1
70°-80°	1151.7	13.4
80°-90°	109.0	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°	8608.6	100.0
0°-180°	8608.6	100.0

Coefficient of Utilization



REPORT NUMBER: P271351

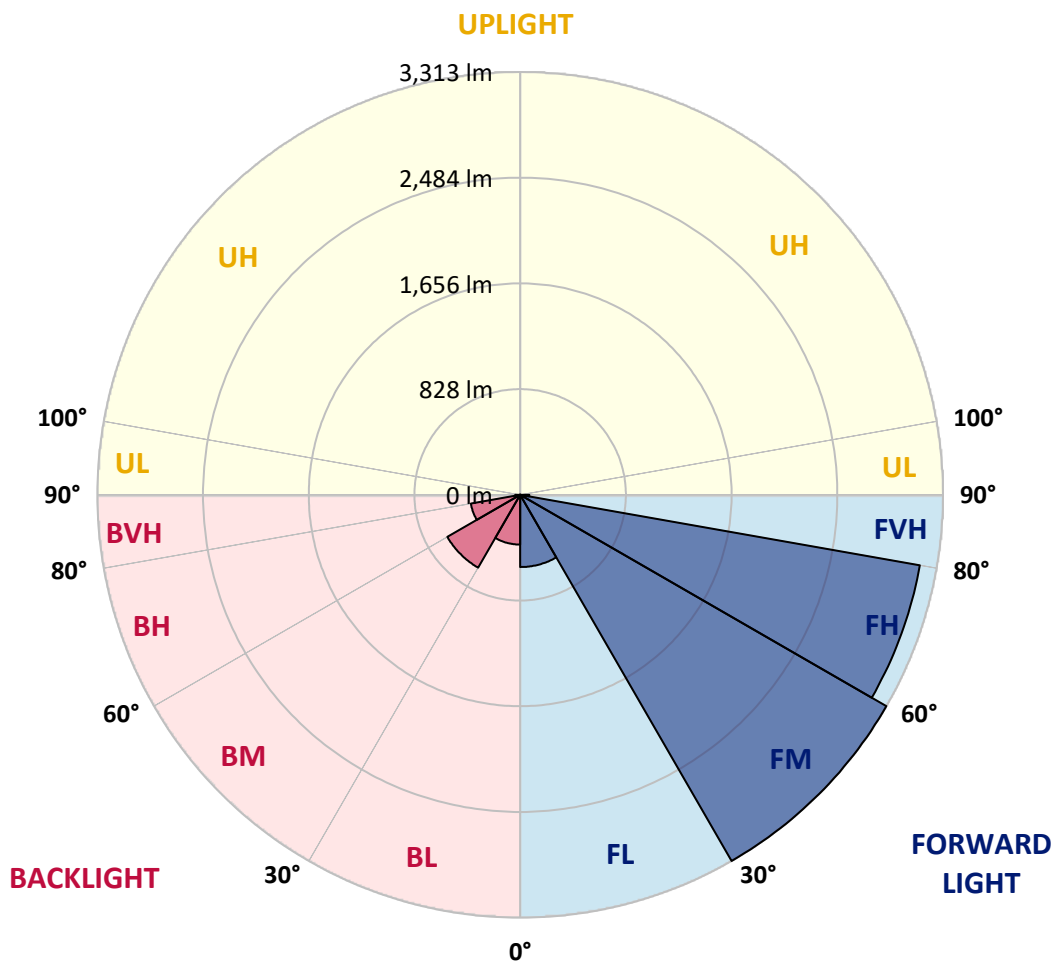
CATALOG NUMBER: XNV2-AF-02-LED-U-T3R-7027-800

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	566.1	6.6			
FM	(30°-60°)	3312.7	38.5			
FH	(60°-80°)	3179.6	36.9			G2/5000
FVH	(80°-90°)	70.8	0.8			G1/100
BL	(0°-30°)	390.2	4.5	B1/500		
BM	(30°-60°)	658.7	7.7	B1/1000		
BH	(60°-80°)	392.3	4.6	B1/500		G1/500
BVH	(80°-90°)	38.2	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





REPORT NUMBER: P271351

CATALOG NUMBER: XNV2-AF-02-LED-U-T3R-7027-800

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77.5°	85°
0°	1267.0	1267.0	1267.0	1267.0	1267.0	1267.0	1267.0	1267.0	1267.0	1267.0	1267.0
2.5°	1136.0	1141.3	1141.9	1157.3	1164.3	1181.8	1200.9	1218.0	1233.0	1238.3	1247.7
5°	1022.2	1022.2	1023.8	1033.9	1053.6	1081.7	1121.8	1165.3	1211.0	1222.2	1250.5
7.5°	962.7	963.6	964.7	974.8	990.2	1015.3	1055.1	1114.7	1190.9	1209.5	1259.0
10°	968.0	966.2	960.9	958.9	965.3	981.2	1015.9	1077.0	1173.8	1202.7	1274.4
12.5°	1051.5	1048.2	1030.6	1005.2	981.8	975.9	999.9	1057.8	1165.9	1202.7	1300.4
15°	1194.6	1196.7	1162.1	1108.9	1047.8	1006.2	1003.0	1050.8	1163.1	1205.7	1330.7
17.5°	1380.9	1382.0	1334.1	1256.9	1155.2	1069.5	1024.8	1050.8	1163.1	1208.9	1360.0
20°	1578.9	1571.3	1517.1	1420.2	1288.2	1157.3	1064.8	1057.3	1166.4	1213.7	1387.7
22.5°	1748.6	1741.6	1684.6	1583.1	1431.9	1261.1	1118.5	1078.5	1184.0	1233.5	1426.6
25°	1897.0	1901.3	1845.8	1731.6	1575.1	1378.2	1198.9	1127.6	1220.6	1269.0	1474.5
27.5°	2077.4	2069.3	2005.6	1896.4	1722.4	1499.5	1299.4	1189.3	1264.3	1312.2	1533.0
30°	2285.9	2282.2	2196.0	2083.8	1884.7	1635.2	1398.9	1255.8	1321.2	1371.3	1606.4
32.5°	2539.1	2538.7	2446.2	2308.3	2067.3	1788.4	1516.5	1346.7	1404.2	1454.7	1703.8
35°	2826.1	2825.4	2729.7	2547.8	2277.5	1958.1	1654.9	1457.5	1506.9	1560.1	1819.8
37.5°	3025.0	3021.9	2971.9	2795.2	2510.0	2155.7	1827.8	1606.4	1623.4	1683.1	1959.7
40°	3063.4	3082.5	3125.7	3021.3	2763.7	2374.8	2001.2	1766.5	1782.5	1859.2	2135.9
42.5°	3021.9	3047.0	3190.1	3219.3	3017.5	2640.4	2218.4	1988.5	2008.7	2104.0	2342.9
45°	2985.6	3007.4	3186.7	3328.8	3268.3	2929.8	2489.3	2259.3	2297.7	2415.8	2579.2
47.5°	2924.0	2944.1	3124.0	3348.6	3411.4	3208.7	2815.4	2585.1	2651.0	2794.1	2848.3
50°	2920.7	2929.8	3038.3	3282.5	3460.8	3420.3	3176.6	2965.9	3067.2	3232.0	3146.4
52.5°	2839.9	2903.2	3001.6	3177.2	3461.9	3543.9	3532.7	3383.6	3539.6	3722.0	3473.0
55°	2345.0	2417.9	2879.2	3125.7	3455.5	3649.8	3857.9	3827.9	4071.7	4263.9	3839.1
57.5°	2189.7	2220.5	2525.9	3141.1	3508.7	3824.9	4182.9	4305.2	4680.4	4890.2	4278.2
60°	2147.0	2179.5	2455.2	3148.5	3653.0	4143.5	4624.0	4844.3	5396.1	5618.5	4776.7
62.5°	2099.7	2141.7	2460.5	3155.4	3906.2	4615.0	5209.5	5429.1	6131.0	6329.5	5243.9
65°	1961.4	2017.2	2362.1	3111.8	4183.4	5206.7	5983.0	6038.9	6738.1	6864.2	5526.0
67°	1699.1	1760.1	2091.8	2859.6	4158.0	5605.2	6602.0	6420.5	6996.2	7011.6	5434.4
67.5°	1616.1	1679.3	2000.2	2754.7	4085.0	5657.3	6711.4	6473.1	6994.1	6977.0	5349.2
70°	1088.1	1159.4	1416.4	2022.5	3276.7	5265.2	6684.8	6310.9	6535.3	6340.1	4595.9
72.5°	540.2	542.2	706.6	1107.9	1985.3	3776.4	5576.5	5398.9	5297.8	4928.9	3372.5
75°	260.1	265.0	333.6	489.5	837.0	1949.6	3803.1	3642.8	3101.7	2685.6	1687.8
77.5°	198.4	203.2	259.2	318.7	349.1	635.9	1883.7	1522.4	898.8	717.8	475.7
80°	153.3	162.4	218.6	244.8	231.0	254.8	592.3	466.1	349.6	320.9	235.7
82.5°	119.7	125.0	185.7	185.7	159.5	170.8	275.6	269.2	217.1	195.8	126.7
85°	84.6	95.2	149.5	138.3	104.8	105.9	165.0	158.0	111.7	89.9	49.4
87.5°	37.8	48.4	106.4	90.5	55.9	43.1	67.6	58.0	44.1	34.0	22.8
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: P271351

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CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1267.0	1267.0	1267.0	1267.0	1267.0	1267.0	1267.0	1267.0	1267.0	1267.0	1267.0
2.5°	1258.4	1267.0	1280.3	1288.2	1298.9	1303.1	1307.5	1314.8	1320.7	1319.2	1316.5
5°	1270.2	1284.5	1301.0	1306.3	1306.3	1301.0	1297.8	1298.3	1296.8	1295.6	1292.5
7.5°	1287.2	1306.9	1318.5	1313.2	1296.8	1276.0	1256.3	1244.6	1233.5	1226.5	1228.6
10°	1311.2	1332.9	1333.4	1310.1	1270.7	1225.5	1186.7	1161.6	1137.7	1127.1	1130.2
12.5°	1345.8	1367.5	1349.0	1298.3	1229.2	1158.5	1087.0	1035.4	989.3	978.1	974.8
15°	1382.9	1400.0	1358.4	1273.3	1169.6	1053.1	933.2	856.2	804.5	795.4	792.3
17.5°	1415.4	1425.0	1353.7	1228.6	1075.5	891.7	752.4	700.3	689.5	694.8	694.8
20°	1444.1	1440.9	1332.9	1159.4	927.0	713.1	632.1	631.6	646.1	659.3	660.3
22.5°	1480.3	1455.3	1299.9	1056.8	749.7	594.9	581.1	594.9	610.8	625.8	627.3
25°	1523.4	1471.2	1255.8	910.4	602.9	540.2	545.9	557.7	567.8	579.4	579.9
27.5°	1566.6	1483.6	1193.5	738.5	523.1	504.9	511.3	516.2	518.9	526.2	526.2
30°	1616.6	1493.2	1103.6	591.8	486.3	474.1	470.4	468.2	470.4	480.6	481.0
32.5°	1679.3	1510.1	980.7	507.6	469.4	452.2	433.2	422.6	430.0	448.1	451.2
35°	1750.6	1530.4	833.3	474.1	463.4	441.6	406.6	390.0	392.6	409.2	411.9
37.5°	1840.1	1556.5	688.0	466.1	469.4	440.6	394.3	370.9	359.2	359.7	359.2
40°	1954.4	1582.5	573.1	468.2	482.1	443.3	388.4	351.7	327.3	328.3	330.4
42.5°	2074.1	1599.5	500.1	474.7	497.5	446.9	386.4	333.1	311.8	329.9	346.3
45°	2214.1	1594.8	462.4	480.6	509.2	448.6	378.4	330.9	313.4	367.6	398.6
47.5°	2374.8	1574.0	441.1	483.2	512.5	448.1	372.4	337.9	326.8	420.9	456.0
50°	2549.3	1541.5	424.1	478.8	510.9	445.9	378.8	346.3	332.1	432.7	459.8
52.5°	2740.4	1511.8	406.6	469.4	502.8	439.5	386.8	342.7	317.1	398.6	419.2
55°	2966.6	1504.8	386.8	452.8	489.5	432.7	382.6	330.9	300.7	353.4	366.1
57.5°	3225.2	1547.9	361.3	432.7	471.4	418.8	372.4	324.6	294.9	321.5	328.3
60°	3553.4	1643.2	334.2	411.3	449.2	397.9	363.5	326.2	296.4	316.7	318.2
62.5°	3809.9	1728.8	309.6	385.3	419.2	372.9	353.8	327.8	301.2	323.0	320.3
65°	3903.0	1686.7	279.4	346.3	377.3	345.4	340.5	328.8	301.2	326.8	320.9
67°	3711.9	1486.2	250.6	307.6	337.4	320.9	327.8	324.6	295.8	326.2	316.1
67.5°	3621.0	1415.4	243.3	301.2	326.8	313.4	324.6	322.4	294.3	325.1	313.4
70°	2986.1	1015.3	205.4	252.8	273.5	276.1	305.0	308.6	281.4	305.5	284.1
72.5°	2124.8	635.3	177.1	195.8	220.9	236.3	278.3	290.1	264.5	265.4	247.9
75°	1051.5	341.0	158.0	151.2	171.8	196.9	242.6	264.5	239.5	221.3	215.6
77.5°	354.9	193.1	133.6	121.9	133.6	158.0	201.1	231.0	211.2	187.2	183.6
80°	183.6	140.4	104.4	97.9	105.3	122.3	157.6	192.1	180.4	181.5	149.5
82.5°	114.4	85.7	75.0	74.5	79.8	93.7	116.1	155.9	154.9	132.5	96.3
85°	53.2	49.4	47.9	49.4	51.1	53.2	75.5	111.2	117.6	71.2	63.3
87.5°	22.4	21.7	19.1	20.8	22.8	22.4	30.4	47.4	65.9	44.6	41.0
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)