

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: P198941

Luminaire Tested: **XNV2-AF-02-LED-U-T3R-7050-800**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P198941  
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-7050-800  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 5000K, 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: 9909 lumens  
Efficiency: N/A  
Efficacy: 116.6 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

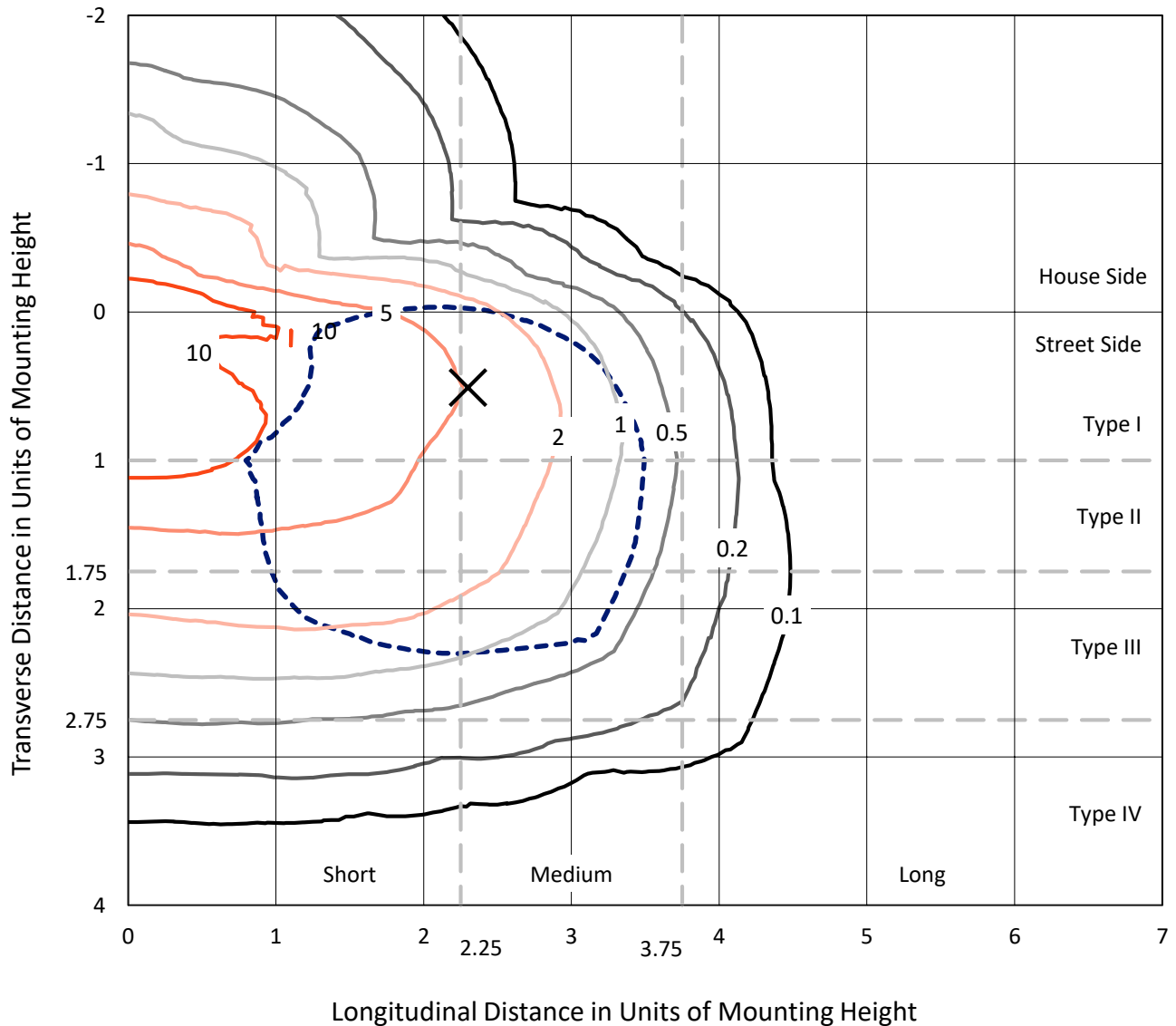


REPORT NUMBER: P198941

CATALOG NUMBER: XNV2-AF-02-LED-U-T3R-7050-800

### Iso-Footcandle Lines of Horizontal Illumination

× Max cd  
 - - - 1/2 Max cd

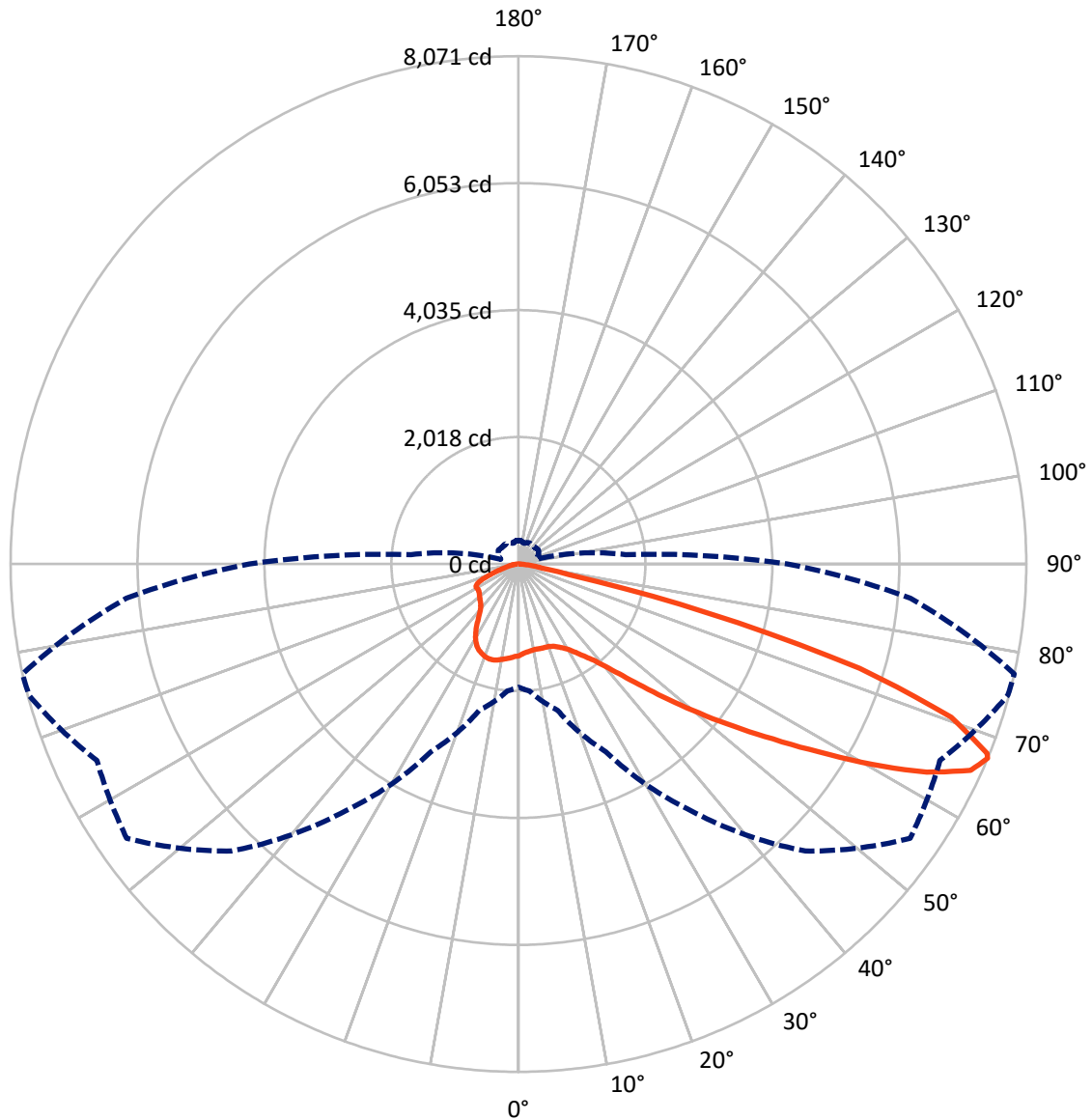


Based on 10 foot mounting height. Maximum calculated value = 17.5 fc  
 Type III - Medium - Full Cutoff

REPORT NUMBER: P198941

CATALOG NUMBER: XNV2-AF-02-LED-U-T3R-7050-800

### Luminous Intensity Polar Plot



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

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CATALOG NUMBER: XNV2-AF-02-LED-U-T3R-7050-800

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1702.8	0.0	1702.8
	% Fixture	17.2	0.0	17.2
<b>Street Side</b>	Lumens	8206.1	0.0	8206.1
	% Fixture	82.8	0.0	82.8
<b>Total</b>	Lumens	9909.0	0.0	9909.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	129.9	1.3
10°-20°	359.7	3.6
20°-30°	611.2	6.2
30°-40°	977.7	9.9
40°-50°	1505.2	15.2
50°-60°	2088.3	21.1
60°-70°	2785.7	28.1
70°-80°	1325.7	13.4
80°-90°	125.5	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°	9909.0	100.0
0°-180°	9909.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P198941

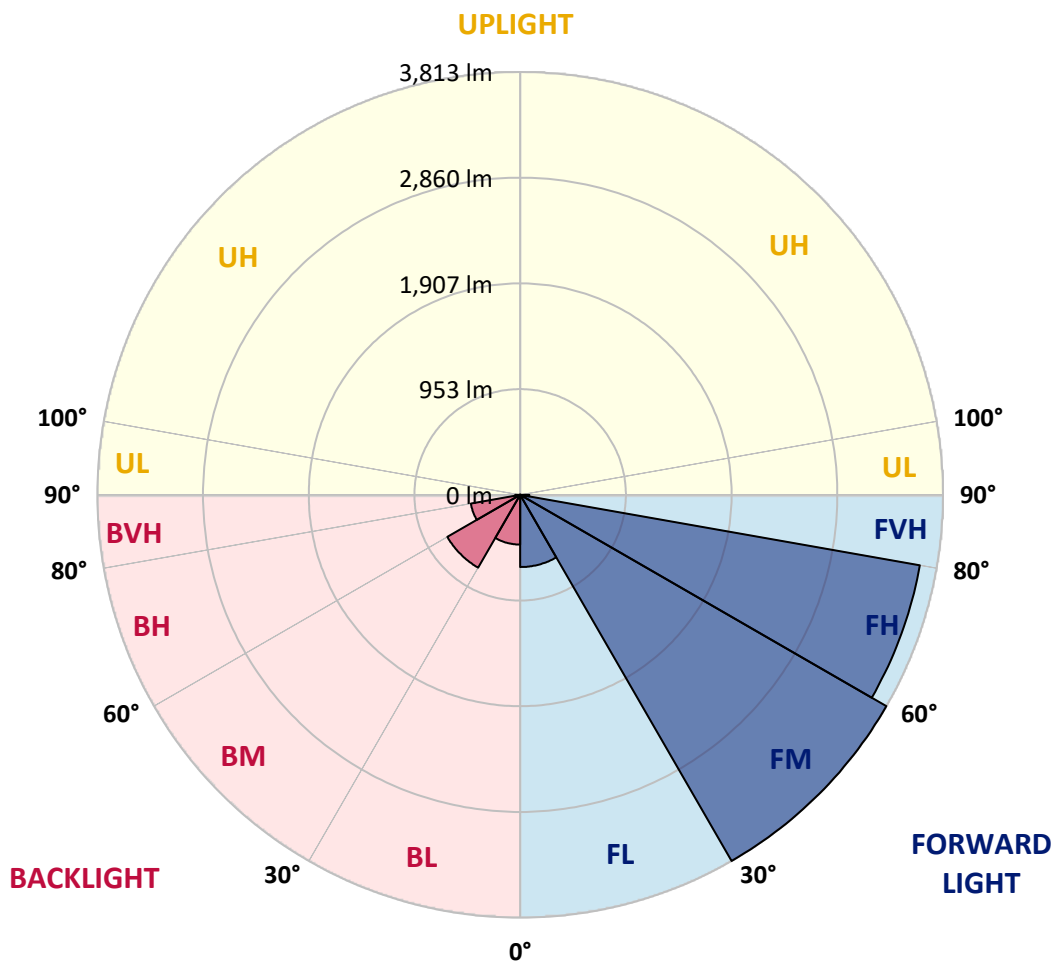
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	651.6	6.6			
FM	(30°-60°)	3813.1	38.5			
FH	(60°-80°)	3659.9	36.9			G2/5000
FVH	(80°-90°)	81.5	0.8			G1/100
BL	(0°-30°)	449.1	4.5	B1/500		
BM	(30°-60°)	758.2	7.7	B1/1000		
BH	(60°-80°)	451.5	4.6	B1/500		G1/500
BVH	(80°-90°)	44.0	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





REPORT NUMBER: P198941

CATALOG NUMBER: XNV2-AF-02-LED-U-T3R-7050-800

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77.5°	85°
0°	1458.3	1458.3	1458.3	1458.3	1458.3	1458.3	1458.3	1458.3	1458.3	1458.3	1458.3
2.5°	1307.7	1313.8	1314.4	1332.2	1340.1	1360.3	1382.4	1402.0	1419.1	1425.3	1436.3
5°	1176.6	1176.6	1178.4	1190.1	1212.7	1245.2	1291.1	1341.4	1394.0	1406.9	1439.4
7.5°	1108.0	1109.2	1110.4	1122.1	1139.8	1168.6	1214.6	1283.2	1370.8	1392.2	1449.2
10°	1114.1	1112.3	1106.2	1103.7	1111.1	1129.4	1169.2	1239.7	1351.2	1384.2	1466.9
12.5°	1210.3	1206.6	1186.4	1157.0	1130.0	1123.3	1150.9	1217.6	1342.0	1384.2	1496.9
15°	1375.0	1377.5	1337.7	1276.4	1206.0	1158.2	1154.5	1209.7	1338.9	1387.9	1531.8
17.5°	1589.4	1590.6	1535.5	1446.7	1329.7	1231.1	1179.7	1209.7	1338.9	1391.6	1565.5
20°	1817.3	1808.7	1746.2	1634.7	1482.8	1332.2	1225.6	1217.0	1342.6	1397.1	1597.4
22.5°	2012.7	2004.7	1939.2	1822.2	1648.2	1451.6	1287.5	1241.5	1362.8	1419.8	1642.1
25°	2183.5	2188.4	2124.7	1993.1	1813.0	1586.4	1379.9	1297.9	1405.1	1460.8	1697.2
27.5°	2391.2	2382.0	2308.5	2182.9	1982.6	1726.0	1495.7	1368.9	1455.3	1510.4	1764.6
30°	2631.3	2627.0	2527.8	2398.5	2169.4	1882.2	1610.2	1445.5	1520.8	1578.4	1849.1
32.5°	2922.8	2922.2	2815.6	2657.0	2379.5	2058.6	1745.6	1550.2	1616.4	1674.6	1961.2
35°	3252.9	3252.3	3142.1	2932.6	2621.5	2254.0	1904.9	1677.6	1734.6	1795.8	2094.7
37.5°	3482.0	3478.3	3420.8	3217.4	2889.1	2481.2	2103.9	1849.1	1868.7	1937.3	2255.8
40°	3526.1	3548.2	3597.8	3477.7	3181.3	2733.6	2303.6	2033.5	2051.8	2140.0	2458.5
42.5°	3478.3	3507.1	3671.9	3705.6	3473.4	3039.2	2553.5	2288.9	2312.2	2421.8	2696.8
45°	3436.7	3461.8	3668.2	3831.8	3761.9	3372.4	2865.2	2600.6	2644.7	2780.7	2968.8
47.5°	3365.6	3388.9	3595.9	3854.4	3926.7	3693.3	3240.7	2975.5	3051.4	3216.2	3278.7
50°	3362.0	3372.4	3497.3	3778.5	3983.7	3937.1	3656.6	3414.0	3530.4	3720.3	3621.7
52.5°	3268.9	3341.8	3455.1	3657.2	3984.9	4079.2	4066.3	3894.8	4074.3	4284.4	3997.7
55°	2699.3	2783.2	3314.2	3597.8	3977.5	4201.1	4440.6	4406.3	4686.8	4907.9	4419.1
57.5°	2520.4	2555.9	2907.5	3615.5	4038.8	4402.6	4814.8	4955.7	5387.5	5628.8	4924.4
60°	2471.4	2508.8	2826.0	3624.1	4204.8	4769.5	5322.6	5576.1	6211.3	6467.3	5498.3
62.5°	2416.9	2465.3	2832.2	3632.1	4496.3	5312.1	5996.3	6249.3	7057.1	7285.6	6036.1
65°	2257.6	2322.0	2718.9	3581.9	4815.4	5993.2	6886.9	6951.2	7756.0	7901.2	6360.7
67°	1955.7	2026.1	2407.7	3291.5	4786.0	6452.0	7599.2	7390.3	8053.1	8070.8	6255.4
67.5°	1860.1	1933.0	2302.4	3170.9	4702.1	6512.0	7725.4	7451.0	8050.6	8031.0	6157.4
70°	1252.5	1334.6	1630.5	2328.1	3771.7	6060.6	7694.7	7264.2	7522.6	7297.8	5290.1
72.5°	621.7	624.1	813.4	1275.2	2285.2	4346.9	6418.9	6214.3	6098.0	5673.5	3882.0
75°	299.5	305.0	384.0	563.5	963.5	2244.2	4377.5	4193.1	3570.2	3091.2	1942.8
77.5°	228.5	234.0	298.3	366.9	401.8	731.9	2168.2	1752.3	1034.5	826.3	547.6
80°	176.4	186.8	251.7	281.7	265.8	293.4	681.7	536.5	402.4	369.3	271.3
82.5°	137.8	143.9	213.8	213.8	183.7	196.6	317.3	309.9	249.9	225.4	145.8
85°	97.4	109.6	172.1	159.2	120.7	121.9	189.9	181.9	128.6	103.5	57.0
87.5°	43.5	55.7	122.5	104.1	64.3	49.6	77.8	66.8	50.8	39.2	26.3
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: P198941

CATALOG NUMBER: XNV2-AF-02-LED-U-T3R-7050-800

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1458.3	1458.3	1458.3	1458.3	1458.3	1458.3	1458.3	1458.3	1458.3	1458.3	1458.3
2.5°	1448.5	1458.3	1473.7	1482.8	1495.1	1500.0	1504.9	1513.5	1520.2	1518.4	1515.3
5°	1462.0	1478.6	1497.5	1503.7	1503.7	1497.5	1493.9	1494.5	1492.6	1491.4	1487.7
7.5°	1481.6	1504.3	1517.8	1511.6	1492.6	1468.8	1446.1	1432.6	1419.8	1411.8	1414.2
10°	1509.2	1534.3	1534.9	1508.0	1462.6	1410.6	1365.9	1337.1	1309.5	1297.3	1300.9
12.5°	1549.0	1574.1	1552.7	1494.5	1414.9	1333.4	1251.3	1191.9	1138.6	1125.8	1122.1
15°	1591.9	1611.5	1563.7	1465.7	1346.3	1212.1	1074.3	985.5	926.1	915.7	912.0
17.5°	1629.2	1640.3	1558.2	1414.2	1237.8	1026.5	866.1	806.0	793.8	799.9	799.9
20°	1662.3	1658.6	1534.3	1334.6	1067.0	820.7	727.6	727.0	743.6	758.9	760.1
22.5°	1704.0	1675.2	1496.3	1216.4	863.0	684.8	668.8	684.8	703.1	720.3	722.1
25°	1753.6	1693.5	1445.5	1048.0	694.0	621.7	628.4	641.9	653.5	667.0	667.6
27.5°	1803.2	1707.6	1373.8	850.1	602.1	581.3	588.6	594.1	597.2	605.8	605.8
30°	1860.8	1718.7	1270.3	681.1	559.8	545.7	541.4	539.0	541.4	553.1	553.7
32.5°	1933.0	1738.3	1128.8	584.3	540.2	520.6	498.6	486.3	494.9	515.7	519.4
35°	2015.1	1761.5	959.2	545.7	533.5	508.4	467.9	449.0	452.0	471.0	474.1
37.5°	2118.0	1791.5	792.0	536.5	540.2	507.1	453.9	426.9	413.4	414.0	413.4
40°	2249.7	1821.6	659.7	539.0	554.9	510.2	447.1	404.9	376.7	377.9	380.4
42.5°	2387.5	1841.2	575.7	546.3	572.7	514.5	444.7	383.4	358.9	379.7	398.7
45°	2548.6	1835.6	532.3	553.1	586.2	516.3	435.5	381.0	360.8	423.2	458.8
47.5°	2733.6	1811.8	507.8	556.1	589.8	515.7	428.7	388.9	376.1	484.5	524.9
50°	2934.5	1774.4	488.2	551.2	588.0	513.3	436.1	398.7	382.2	498.0	529.2
52.5°	3154.3	1740.1	467.9	540.2	578.8	505.9	445.3	394.4	365.0	458.8	482.6
55°	3414.6	1732.1	445.3	521.2	563.5	498.0	440.4	381.0	346.1	406.7	421.4
57.5°	3712.3	1781.7	415.9	498.0	542.7	482.0	428.7	373.6	339.3	369.9	377.9
60°	4090.2	1891.4	384.6	473.5	516.9	458.1	418.3	375.5	341.2	364.4	366.3
62.5°	4385.4	1990.0	356.5	443.4	482.6	429.4	407.3	377.3	346.7	371.8	368.7
65°	4492.6	1941.6	321.6	398.7	434.3	397.5	392.0	378.5	346.7	376.1	369.3
67°	4272.7	1710.7	288.5	354.0	388.3	369.3	377.3	373.6	340.5	375.5	363.8
67.5°	4168.0	1629.2	279.9	346.7	376.1	360.8	373.6	371.2	338.7	374.2	360.8
70°	3437.3	1168.6	236.4	290.9	314.8	317.9	351.0	355.2	324.0	351.6	327.1
72.5°	2445.7	731.3	204.0	225.4	254.2	271.9	320.3	333.8	304.4	305.6	285.4
75°	1210.3	392.6	181.9	173.9	197.8	226.6	279.3	304.4	275.6	254.8	248.1
77.5°	408.5	222.3	153.7	140.3	153.7	181.9	231.5	265.8	243.2	215.6	211.3
80°	211.3	161.7	120.0	112.7	121.3	140.9	181.3	221.1	207.6	208.9	172.1
82.5°	131.7	98.6	86.4	85.7	91.9	107.8	133.5	179.5	178.2	152.5	110.9
85°	61.2	57.0	55.1	57.0	58.8	61.2	87.0	128.0	135.4	82.1	72.9
87.5°	25.7	25.1	22.0	23.9	26.3	25.7	34.9	54.5	75.9	51.4	47.2
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)