

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: P271321

Luminaire Tested: **XNV2-AF-02-LED-U-SL4-7027**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P271321  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24284)  
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-SL4-7027  
Description: XNV2 ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE IV  
SPILL LIGHT ELIMINATOR OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 9994.4 lumens  
Efficiency: N/A  
Efficacy: 90.0 lumens/watt  
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')  
IES Classification: Type IV - Short - Non-Cutoff  
BUG Rating: B1 - U0 - G3

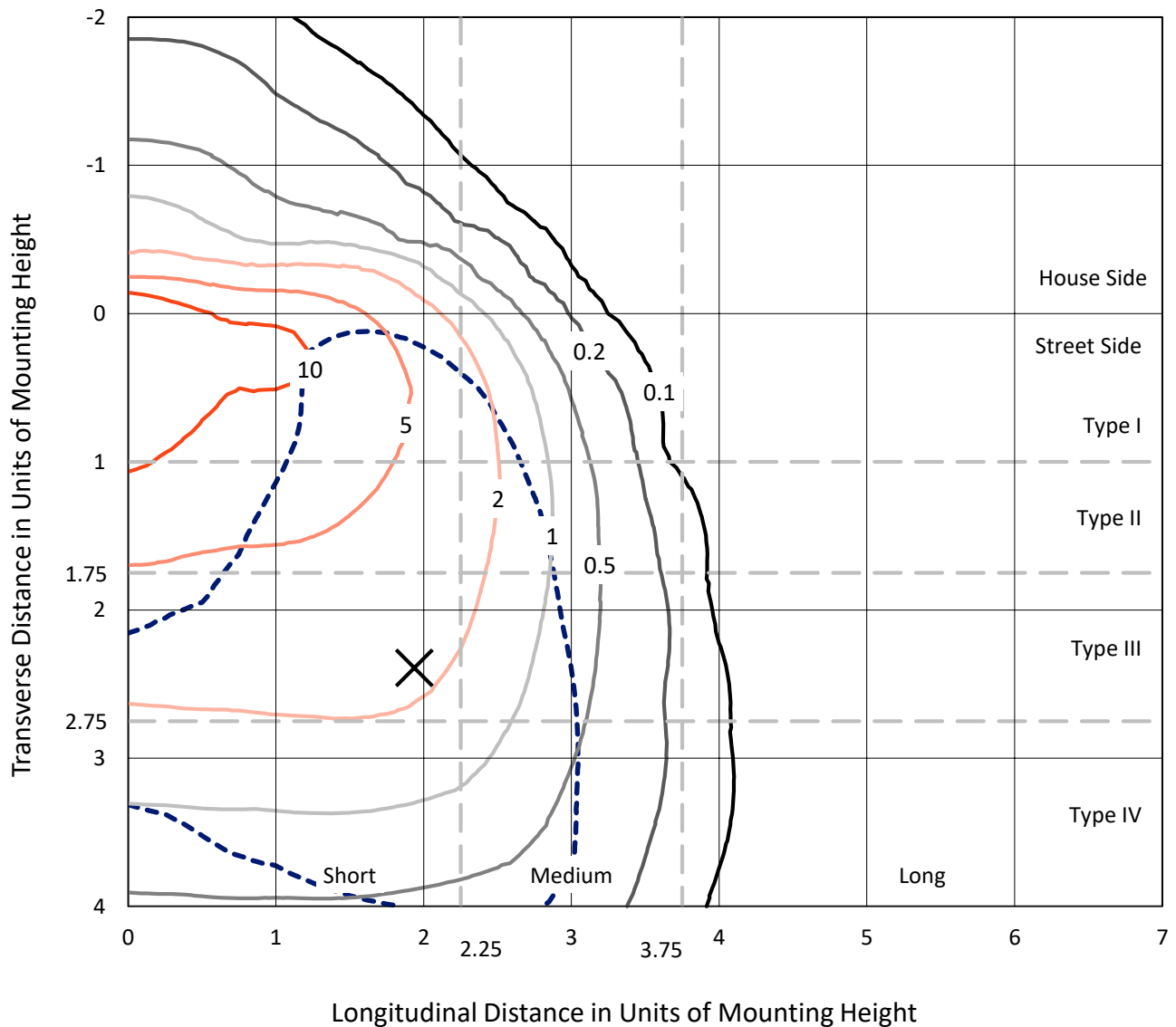
Input Watts (W): 111  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 28.75 FT



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### Iso-Footcandle Lines of Horizontal Illumination

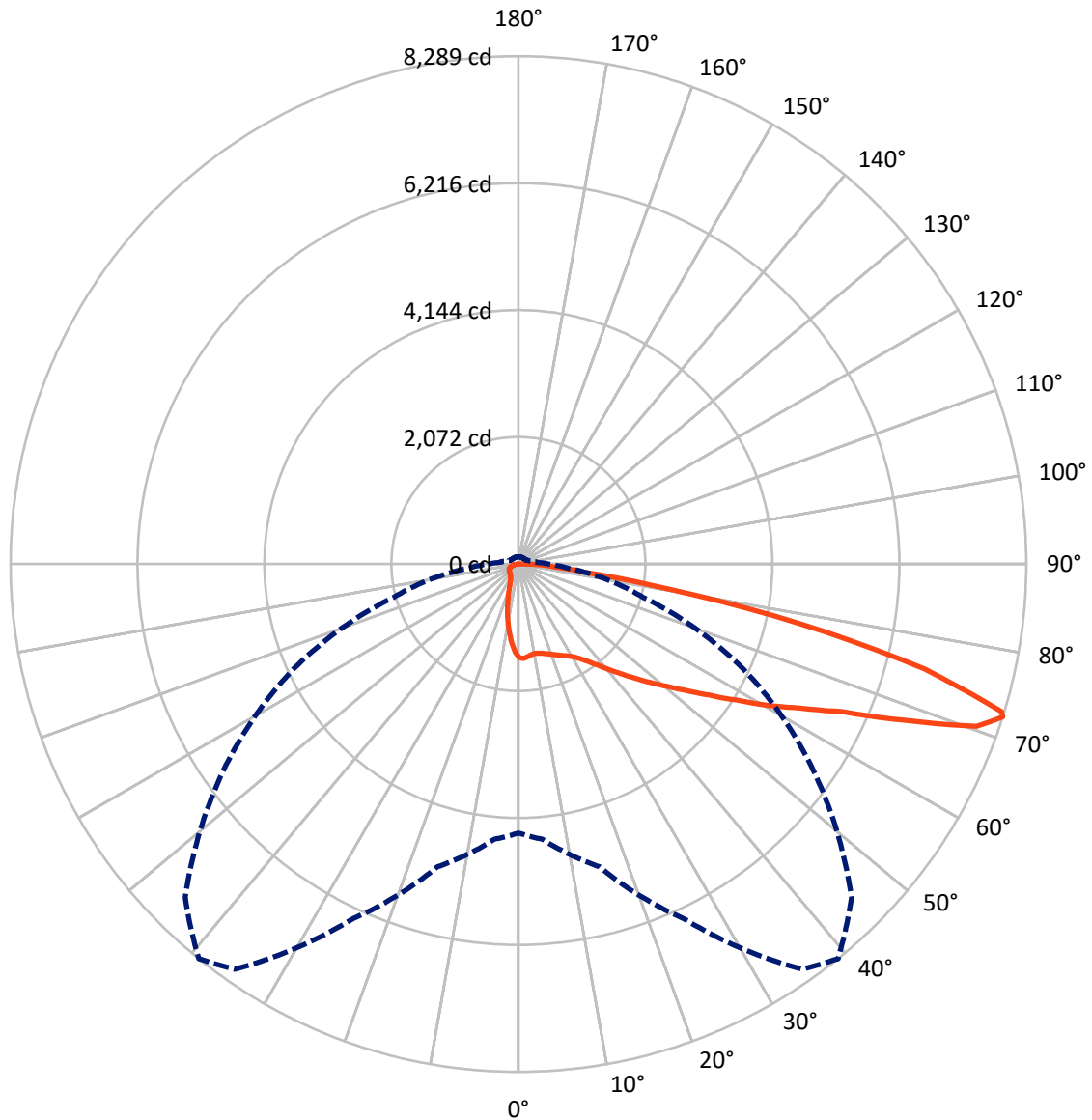
× Max cd  
 - - - 1/2 Max cd



Based on 10 foot mounting height. Maximum calculated value = 15.3 fc  
 Type IV - Short - Non-Cutoff

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### Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral      - - - Horizontal Cone Through 72-Deg Vertical

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**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	1146.0	0.0	1146.0
	% Fixture	11.5	0.0	11.5
<b>Street Side</b>	Lumens	8848.4	0.0	8848.4
	% Fixture	88.5	0.0	88.5
<b>Total</b>	Lumens	9994.4	0.0	9994.4
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	131.2	1.3
10°-20°	329.6	3.3
20°-30°	513.6	5.1
30°-40°	790.8	7.9
40°-50°	1289.2	12.9
50°-60°	2003.3	20.0
60°-70°	2681.4	26.8
70°-80°	1928.3	19.3
80°-90°	326.9	3.3
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°	9994.4	100.0
0°-180°	9994.4	100.0

**Coefficient of Utilization**



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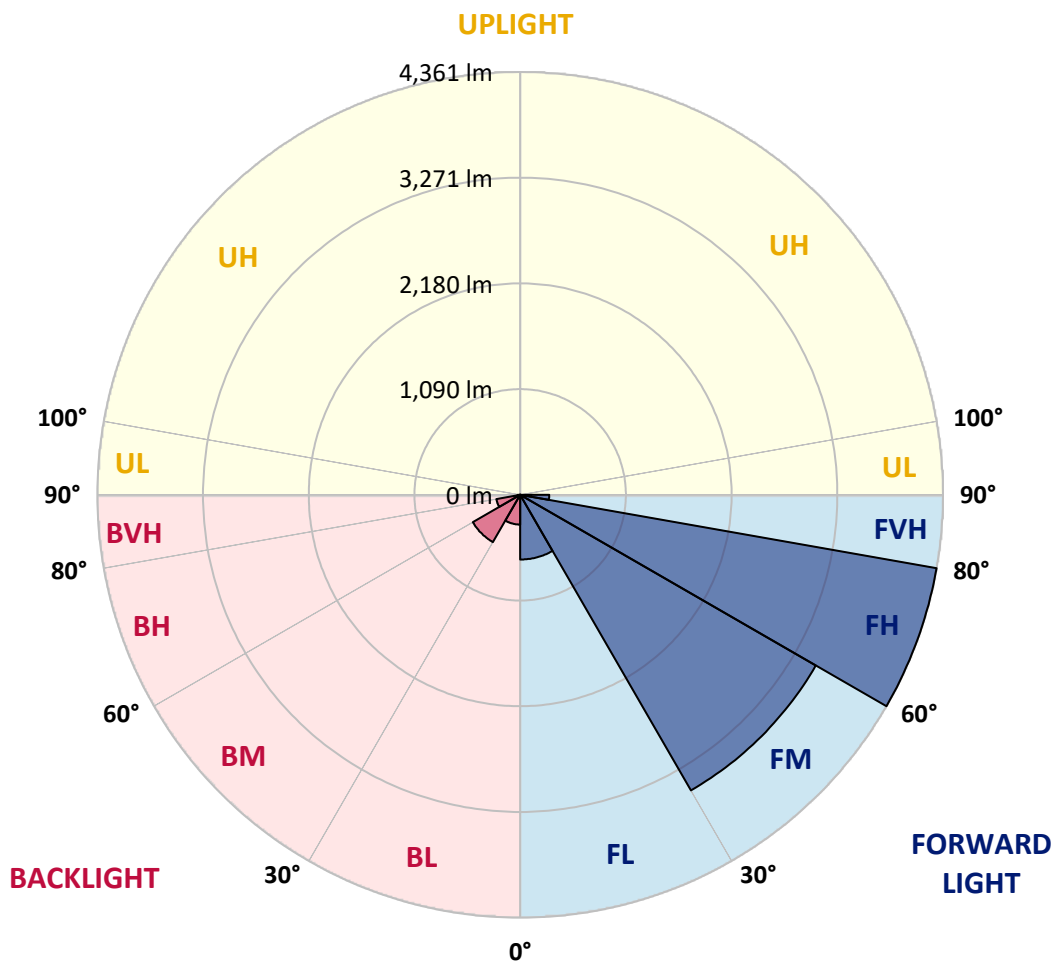
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	667.6	6.7			
FM	(30°-60°)	3520.2	35.2			
FH	(60°-80°)	4360.7	43.6			G2/5000
FVH	(80°-90°)	299.9	3.0			G3/500
BL	(0°-30°)	306.8	3.1	B1/500		
BM	(30°-60°)	563.2	5.6	B1/1000		
BH	(60°-80°)	249.0	2.5	B1/500		G1/500
BVH	(80°-90°)	27.0	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B1-U0-G3**

Type IV Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	1526.3	1526.3	1526.3	1526.3	1526.3	1526.3	1526.3	1526.3	1526.3	1526.3	1526.3
2.5°	1559.2	1559.8	1557.9	1551.8	1546.4	1543.7	1539.1	1531.0	1520.3	1512.9	1506.8
5°	1544.5	1546.4	1545.2	1535.1	1525.6	1520.3	1512.9	1501.4	1487.5	1481.3	1467.3
7.5°	1533.0	1534.3	1530.4	1518.9	1500.9	1494.2	1480.6	1465.9	1453.2	1444.5	1427.6
10°	1525.1	1526.3	1522.9	1511.6	1491.5	1483.5	1467.3	1451.2	1434.5	1423.6	1404.9
12.5°	1513.6	1516.2	1516.2	1510.9	1497.5	1492.2	1476.1	1458.6	1443.1	1431.7	1408.3
15°	1511.6	1514.9	1521.0	1520.3	1516.2	1512.2	1499.5	1482.1	1468.5	1455.3	1426.4
17.5°	1528.3	1535.7	1547.8	1551.8	1549.1	1540.5	1525.6	1509.5	1494.8	1482.1	1446.5
20°	1570.5	1574.5	1592.8	1600.8	1587.3	1574.5	1555.1	1534.3	1521.0	1510.9	1465.2
22.5°	1634.3	1639.8	1654.5	1655.1	1627.0	1611.5	1586.6	1561.3	1548.5	1544.5	1490.7
25°	1736.3	1734.9	1738.9	1722.2	1671.2	1653.2	1623.0	1593.5	1584.7	1592.8	1528.3
27.5°	1858.5	1855.1	1842.3	1798.8	1721.5	1698.1	1661.9	1635.6	1635.6	1654.5	1579.3
30°	1999.3	1995.9	1954.4	1881.2	1781.2	1754.4	1716.2	1688.8	1702.7	1738.9	1648.4
32.5°	2148.2	2136.2	2077.8	1979.9	1866.5	1836.9	1800.1	1771.8	1798.8	1860.4	1747.7
35°	2288.5	2281.8	2210.0	2093.9	1976.5	1951.7	1926.1	1891.3	1934.2	2030.2	1888.0
37.5°	2433.4	2427.9	2340.2	2216.7	2110.7	2093.9	2072.5	2048.2	2117.5	2243.5	2077.8
40°	2595.2	2584.3	2473.7	2350.2	2267.1	2259.0	2247.6	2240.8	2352.2	2540.0	2317.9
42.5°	2778.3	2757.4	2614.5	2497.2	2437.5	2444.2	2438.1	2464.9	2635.4	2882.2	2603.7
45°	2987.6	2946.0	2754.7	2653.5	2625.9	2652.8	2665.5	2734.0	2970.2	3277.5	2923.2
47.5°	3183.6	3129.9	2908.4	2823.3	2838.6	2884.9	2921.2	3041.9	3337.2	3667.9	3249.2
50°	3364.0	3303.5	3072.8	2999.0	3074.1	3139.8	3215.0	3385.4	3727.5	4069.7	3548.5
52.5°	3497.6	3453.9	3237.1	3190.9	3344.5	3431.7	3551.8	3767.2	4122.1	4452.9	3815.6
55°	3600.8	3577.3	3397.5	3411.0	3650.4	3775.2	3920.8	4168.3	4539.4	4796.4	4030.2
57.5°	3720.2	3702.8	3580.6	3676.7	4030.2	4187.2	4358.9	4633.9	4936.5	5098.9	4198.6
60°	3846.4	3846.4	3784.6	3996.6	4505.2	4685.0	4856.1	5070.2	5332.3	5371.3	4266.9
62.5°	3941.7	3966.5	3988.6	4337.5	4955.9	5179.4	5367.4	5572.6	5742.3	5505.5	4106.1
65°	4079.8	4132.8	4257.5	4731.4	5514.2	5806.7	6060.3	6232.8	6074.5	5398.9	3580.6
67.5°	4317.3	4395.9	4661.6	5317.6	6369.1	6807.0	7053.3	6755.4	6009.4	4727.3	2742.6
70°	4531.3	4642.0	5096.3	6061.8	7479.9	7934.9	7821.5	6634.1	5233.7	3465.3	1687.3
72°	4389.1	4509.9	5116.3	6385.7	8073.7	8288.5	7690.7	5879.1	4044.3	2114.7	831.9
72.5°	4295.9	4421.3	5051.3	6377.6	8089.9	8243.6	7508.8	5579.4	3671.3	1850.4	672.9
75°	3588.6	3696.0	4343.5	5652.4	7129.0	6847.3	5859.7	3610.8	1687.3	597.8	346.1
77.5°	2343.5	2425.3	2994.9	3916.2	4993.6	4722.6	3566.6	1690.7	632.6	362.9	260.2
80°	1177.5	1235.8	1602.8	2059.1	2695.1	2479.7	1646.5	817.8	423.3	262.3	204.6
82.5°	819.2	872.9	1103.7	1051.3	1126.5	1090.3	774.2	682.4	316.7	165.6	107.3
85°	687.1	742.7	913.0	749.5	613.3	558.8	554.9	644.8	209.3	81.8	90.5
87.5°	599.1	683.7	753.5	547.4	420.6	371.0	408.5	591.1	66.5	44.9	27.5
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°	1526.3	1526.3	1526.3	1526.3	1526.3	1526.3	1526.3	1526.3	1526.3	1526.3	1526.3
2.5°	1496.8	1494.8	1484.7	1469.3	1457.9	1450.6	1436.4	1435.8	1437.1	1425.0	1429.7
5°	1454.5	1446.5	1420.3	1384.7	1355.9	1328.5	1298.2	1288.2	1279.5	1261.3	1263.3
7.5°	1410.2	1396.1	1350.5	1292.2	1236.4	1185.6	1135.2	1110.3	1091.6	1068.1	1068.1
10°	1384.1	1362.0	1292.2	1207.0	1118.4	1043.9	968.8	923.8	890.9	860.8	858.8
12.5°	1382.8	1349.3	1251.9	1134.5	1013.1	908.5	805.8	736.7	687.7	652.1	648.8
15°	1393.5	1346.5	1218.5	1066.7	913.8	777.7	650.8	562.9	500.4	460.9	456.9
17.5°	1402.9	1343.1	1182.2	995.6	817.2	651.5	510.5	419.2	360.3	328.2	324.6
20°	1411.5	1335.8	1135.8	920.6	710.5	533.4	399.1	325.4	286.5	268.4	266.3
22.5°	1424.4	1329.1	1087.6	836.0	605.8	434.2	329.4	276.4	255.6	246.9	245.5
25°	1445.2	1329.8	1040.5	749.5	509.9	361.6	285.1	252.2	240.8	234.8	234.8
27.5°	1475.3	1337.8	994.3	661.5	428.8	312.0	259.0	239.5	232.1	227.5	226.2
30°	1519.7	1352.6	945.3	578.2	364.4	277.8	243.5	231.5	225.5	221.4	220.8
32.5°	1584.0	1378.7	893.6	502.5	315.3	253.6	232.1	224.8	220.1	216.8	216.0
35°	1680.0	1425.0	843.4	438.2	280.5	236.2	222.7	216.8	214.1	212.7	212.0
37.5°	1820.9	1499.5	795.7	387.8	257.6	224.8	213.3	210.1	208.6	208.6	208.6
40°	1998.0	1597.5	752.8	352.2	244.9	216.0	206.6	203.9	203.9	204.6	204.6
42.5°	2213.3	1720.3	715.9	328.2	237.5	210.1	201.9	200.6	200.0	200.0	200.6
45°	2463.6	1865.2	693.0	309.2	232.1	206.6	198.5	197.9	195.2	193.9	193.9
47.5°	2715.1	2020.1	691.8	298.5	225.5	202.6	195.2	195.2	189.9	187.1	187.8
50°	2950.0	2158.9	706.4	295.9	221.4	196.5	191.9	192.5	185.2	181.7	181.2
52.5°	3139.1	2264.9	724.7	299.2	221.4	191.2	185.8	189.3	181.2	177.1	176.4
55°	3285.6	2338.7	731.3	306.6	224.0	186.5	180.5	185.8	179.8	174.5	174.5
57.5°	3390.2	2362.4	702.5	309.9	228.1	185.8	175.1	185.2	181.7	175.1	175.1
60°	3351.8	2226.1	595.0	297.2	227.5	184.5	171.0	186.5	188.6	181.2	181.2
62.5°	3053.2	1862.5	477.7	268.4	216.0	179.8	166.4	185.2	193.2	190.5	189.3
65°	2485.7	1366.1	370.3	234.2	196.5	169.7	156.3	173.2	182.4	185.2	185.8
67.5°	1751.8	864.8	287.8	199.2	172.5	155.0	144.9	153.0	156.3	157.7	160.3
70°	958.0	468.2	228.8	167.8	147.6	140.2	132.8	133.5	132.2	130.9	132.2
72°	481.0	306.0	193.2	145.5	130.9	126.1	122.8	120.7	120.7	118.8	119.5
72.5°	413.9	284.5	186.5	140.2	126.8	122.8	120.2	118.0	117.4	116.2	116.7
75°	275.7	225.5	155.6	117.4	108.1	105.3	106.7	104.7	105.3	104.1	104.7
77.5°	222.7	193.9	132.2	99.4	92.5	88.6	91.3	91.8	93.2	91.8	91.3
80°	186.5	165.1	110.8	81.8	77.2	73.8	75.2	79.8	80.5	76.4	75.7
82.5°	120.7	132.8	87.2	63.7	59.1	57.8	61.1	65.8	67.2	61.8	60.4
85°	101.2	106.7	63.2	43.6	38.8	37.5	44.2	49.0	52.3	47.0	45.6
87.5°	28.1	52.3	30.8	20.8	17.4	17.4	21.5	25.5	30.3	30.8	30.8
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)