

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: P198943

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198943
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
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1050mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 12265 lumens
Efficiency: N/A
Efficacy: 110.5 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type III - Medium - Full Cutoff
BUG Rating: B2 - U0 - G2

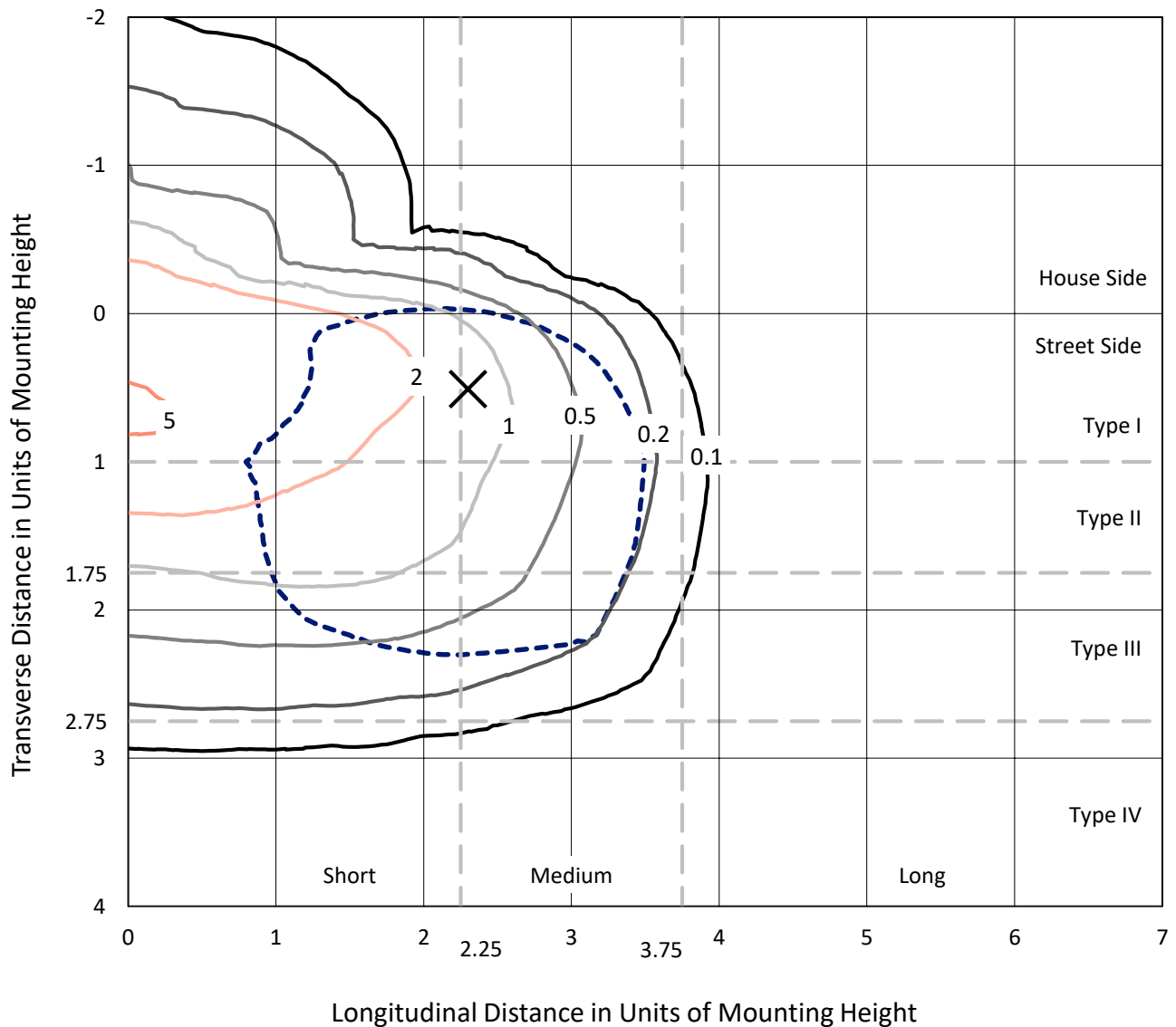
Input Watts (W): 111
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

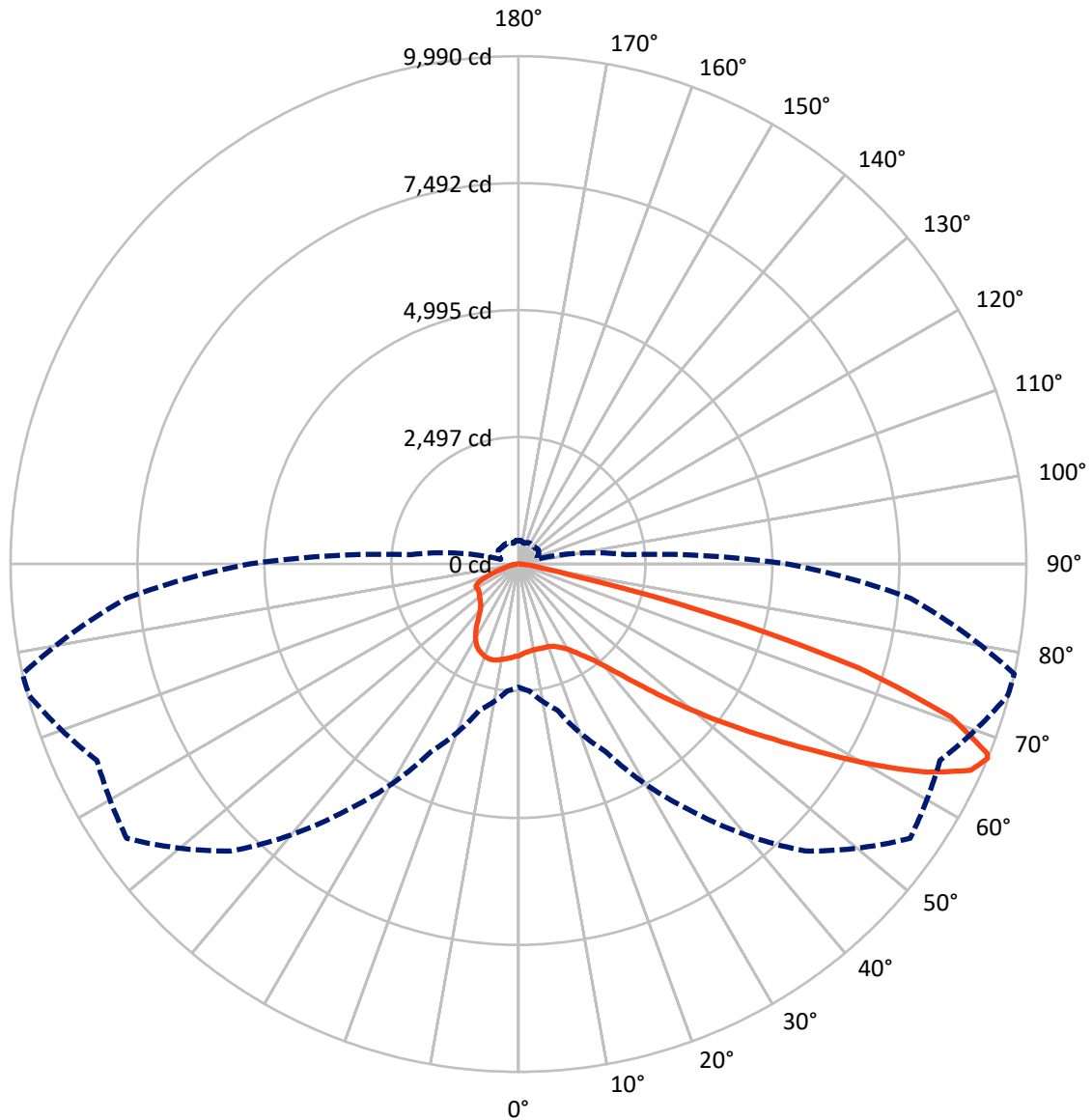
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 5.4 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	2107.7	0.0	2107.7
	% Fixture	17.2	0.0	17.2
Street Side	Lumens	10157.3	0.0	10157.3
	% Fixture	82.8	0.0	82.8
Total	Lumens	12265.0	0.0	12265.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	160.8	1.3
10°-20°	445.2	3.6
20°-30°	756.5	6.2
30°-40°	1210.2	9.9
40°-50°	1863.1	15.2
50°-60°	2584.9	21.1
60°-70°	3448.0	28.1
70°-80°	1640.9	13.4
80°-90°	155.4	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°	12265.0	100.0
0°-180°	12265.0	100.0



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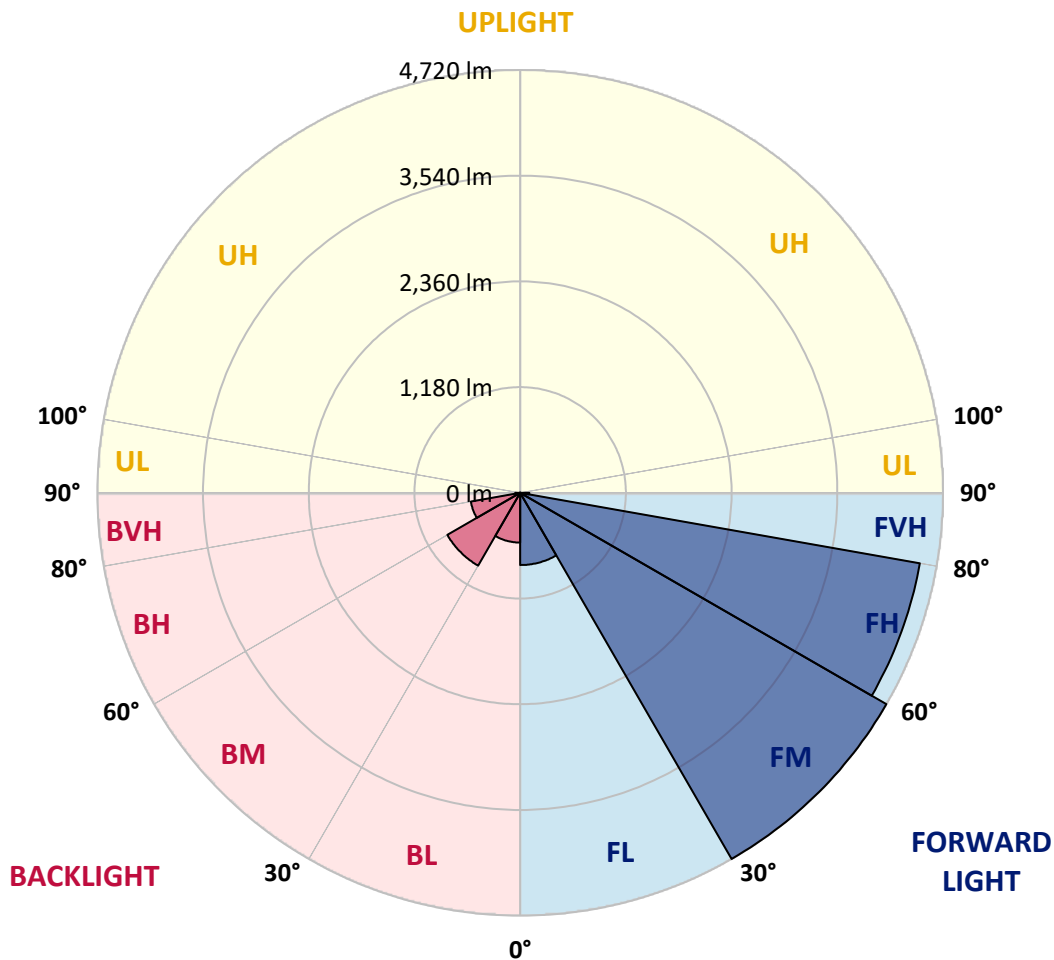
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	806.5	6.6			
FM	(30°-60°)	4719.7	38.5			
FH	(60°-80°)	4530.1	36.9			G2/5000
FVH	(80°-90°)	100.9	0.8			G2/225
BL	(0°-30°)	555.9	4.5	B2/1000		
BM	(30°-60°)	938.5	7.7	B1/1000		
BH	(60°-80°)	558.9	4.6	B2/1000		G2/1000
BVH	(80°-90°)	54.5	0.4			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 III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77.5°	85°
0°	1805.1	1805.1	1805.1	1805.1	1805.1	1805.1	1805.1	1805.1	1805.1	1805.1	1805.1
2.5°	1618.6	1626.2	1626.9	1648.9	1658.8	1683.8	1711.1	1735.3	1756.6	1764.1	1777.8
5°	1456.4	1456.4	1458.6	1473.0	1501.1	1541.3	1598.1	1660.3	1725.5	1741.4	1781.6
7.5°	1371.4	1373.0	1374.5	1388.9	1410.9	1446.5	1503.4	1588.3	1696.7	1723.2	1793.7
10°	1379.0	1376.7	1369.2	1366.1	1375.2	1398.0	1447.3	1534.4	1672.4	1713.4	1815.7
12.5°	1498.0	1493.5	1468.5	1432.1	1398.7	1390.4	1424.5	1507.1	1661.0	1713.4	1852.8
15°	1702.0	1705.0	1655.7	1579.9	1492.7	1433.6	1429.1	1497.3	1657.3	1717.9	1896.1
17.5°	1967.3	1968.8	1900.6	1790.7	1645.9	1523.8	1460.1	1497.3	1657.3	1722.5	1937.8
20°	2249.3	2238.7	2161.4	2023.4	1835.4	1648.9	1517.0	1506.4	1661.8	1729.3	1977.2
22.5°	2491.2	2481.3	2400.2	2255.4	2040.1	1796.7	1593.6	1536.7	1686.8	1757.3	2032.5
25°	2702.7	2708.8	2629.9	2466.9	2244.0	1963.5	1708.0	1606.5	1739.1	1808.1	2100.8
27.5°	2959.7	2948.3	2857.4	2701.9	2454.0	2136.4	1851.3	1694.4	1801.3	1869.5	2184.1
30°	3256.9	3251.6	3128.8	2968.8	2685.3	2329.7	1993.1	1789.2	1882.4	1953.7	2288.8
32.5°	3617.8	3617.0	3485.1	3288.7	2945.3	2548.0	2160.6	1918.8	2000.7	2072.7	2427.5
35°	4026.4	4025.6	3889.2	3629.9	3244.8	2789.9	2357.8	2076.5	2147.0	2222.8	2592.8
37.5°	4309.9	4305.4	4234.1	3982.4	3576.1	3071.1	2604.1	2288.8	2313.0	2397.9	2792.2
40°	4364.5	4391.8	4453.2	4304.6	3937.7	3383.5	2851.3	2517.0	2539.7	2648.9	3043.1
42.5°	4305.4	4341.0	4544.9	4586.6	4299.3	3761.8	3160.6	2833.1	2861.9	2997.6	3338.0
45°	4253.8	4284.9	4540.4	4742.8	4656.4	4174.2	3546.5	3219.0	3273.6	3441.9	3674.6
47.5°	4165.9	4194.7	4450.9	4770.9	4860.3	4571.5	4011.2	3683.0	3777.0	3980.9	4058.2
50°	4161.3	4174.2	4328.9	4676.8	4930.8	4873.2	4526.0	4225.8	4369.8	4604.8	4482.8
52.5°	4046.1	4136.3	4276.6	4526.7	4932.3	5049.1	5033.2	4820.9	5043.0	5303.1	4948.3
55°	3341.0	3444.9	4102.2	4453.2	4923.2	5200.0	5496.4	5453.9	5801.1	6074.8	5469.8
57.5°	3119.7	3163.6	3598.8	4475.2	4999.0	5449.4	5959.6	6134.0	6668.4	6967.1	6095.3
60°	3059.0	3105.3	3498.0	4485.8	5204.5	5903.5	6588.1	6901.9	7688.1	8005.0	6805.7
62.5°	2991.5	3051.4	3505.6	4495.7	5565.4	6575.2	7422.0	7735.1	8735.1	9017.8	7471.3
65°	2794.4	2874.0	3365.3	4433.5	5960.3	7418.2	8524.3	8603.9	9600.1	9779.8	7873.1
67°	2420.7	2507.9	2980.2	4074.1	5924.0	7986.0	9406.0	9147.5	9967.8	9989.8	7742.7
67.5°	2302.4	2392.6	2849.8	3924.8	5820.1	8060.3	9562.2	9222.5	9964.7	9940.5	7621.4
70°	1550.4	1651.9	2018.1	2881.6	4668.5	7501.6	9524.3	8991.3	9311.2	9033.0	6547.9
72.5°	769.5	772.5	1006.8	1578.4	2828.5	5380.4	7945.1	7691.9	7547.9	7022.5	4805.0
75°	370.7	377.5	475.3	697.5	1192.5	2777.8	5418.3	5190.1	4419.1	3826.2	2404.8
77.5°	282.8	289.6	369.2	454.1	497.3	906.0	2683.7	2169.0	1280.5	1022.7	677.8
80°	218.3	231.2	311.6	348.7	329.0	363.1	843.8	664.1	498.1	457.1	335.8
82.5°	170.6	178.2	264.6	264.6	227.4	243.4	392.7	383.6	309.3	279.0	180.4
85°	120.5	135.7	213.0	197.1	149.3	150.9	235.0	225.2	159.2	128.1	70.5
87.5°	53.8	69.0	151.6	128.9	79.6	61.4	96.3	82.6	62.9	48.5	32.6
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°	1805.1	1805.1	1805.1	1805.1	1805.1	1805.1	1805.1	1805.1	1805.1	1805.1	1805.1
2.5°	1793.0	1805.1	1824.0	1835.4	1850.6	1856.6	1862.7	1873.3	1881.7	1879.4	1875.6
5°	1809.6	1830.1	1853.6	1861.2	1861.2	1853.6	1849.1	1849.8	1847.5	1846.0	1841.5
7.5°	1833.9	1861.9	1878.6	1871.0	1847.5	1818.0	1789.9	1773.2	1757.3	1747.5	1750.5
10°	1868.0	1899.1	1899.9	1866.5	1810.4	1746.0	1690.6	1655.0	1620.9	1605.7	1610.2
12.5°	1917.3	1948.4	1921.8	1849.8	1751.3	1650.4	1548.8	1475.3	1409.3	1393.4	1388.9
15°	1970.4	1994.6	1935.5	1814.2	1666.3	1500.3	1329.7	1219.8	1146.3	1133.4	1128.8
17.5°	2016.6	2030.2	1928.7	1750.5	1532.2	1270.6	1072.0	997.7	982.5	990.1	990.1
20°	2057.5	2053.0	1899.1	1651.9	1320.6	1015.9	900.6	899.9	920.4	939.3	940.8
22.5°	2109.1	2073.5	1852.1	1505.6	1068.2	847.6	827.9	847.6	870.3	891.6	893.8
25°	2170.5	2096.2	1789.2	1297.1	859.0	769.5	777.8	794.5	808.9	825.6	826.4
27.5°	2231.9	2113.6	1700.5	1052.3	745.2	719.5	728.6	735.4	739.2	749.8	749.8
30°	2303.2	2127.3	1572.3	843.0	692.9	675.5	670.2	667.1	670.2	684.6	685.3
32.5°	2392.6	2151.5	1397.2	723.2	668.7	644.4	617.1	601.9	612.6	638.3	642.9
35°	2494.2	2180.4	1187.2	675.5	660.3	629.2	579.2	555.7	559.5	583.0	586.8
37.5°	2621.6	2217.5	980.3	664.1	668.7	627.7	561.8	528.4	511.7	512.5	511.7
40°	2784.6	2254.7	816.5	667.1	686.9	631.5	553.4	501.1	466.2	467.8	470.8
42.5°	2955.2	2278.9	712.6	676.2	708.8	636.8	550.4	474.6	444.3	470.0	493.5
45°	3154.5	2272.1	658.8	684.6	725.5	639.1	539.0	471.6	446.5	523.9	567.8
47.5°	3383.5	2242.5	628.5	688.4	730.1	638.3	530.7	481.4	465.5	599.7	649.7
50°	3632.2	2196.3	604.2	682.3	727.8	635.3	539.8	493.5	473.1	616.4	655.0
52.5°	3904.3	2153.8	579.2	668.7	716.4	626.2	551.2	488.2	451.8	567.8	597.4
55°	4226.5	2144.0	551.2	645.2	697.5	616.4	545.1	471.6	428.3	503.4	521.6
57.5°	4595.0	2205.4	514.8	616.4	671.7	596.6	530.7	462.5	420.0	457.9	467.8
60°	5062.7	2341.1	476.1	586.0	639.9	567.1	517.8	464.7	422.3	451.1	453.4
62.5°	5428.1	2463.1	441.2	548.9	597.4	531.4	504.2	467.0	429.1	460.2	456.4
65°	5560.8	2403.2	398.0	493.5	537.5	492.0	485.2	468.5	429.1	465.5	457.1
67°	5288.7	2117.4	357.1	438.2	480.6	457.1	467.0	462.5	421.5	464.7	450.3
67.5°	5159.0	2016.6	346.5	429.1	465.5	446.5	462.5	459.4	419.2	463.2	446.5
70°	4254.6	1446.5	292.6	360.1	389.7	393.5	434.4	439.7	401.0	435.2	404.8
72.5°	3027.2	905.2	252.5	279.0	314.6	336.6	396.5	413.2	376.8	378.3	353.3
75°	1498.0	486.0	225.2	215.3	244.9	280.5	345.7	376.8	341.2	315.4	307.0
77.5°	505.7	275.2	190.3	173.6	190.3	225.2	286.6	329.0	301.0	266.9	261.6
80°	261.6	200.1	148.6	139.5	150.1	174.4	224.4	273.7	257.0	258.5	213.0
82.5°	163.0	122.1	106.9	106.1	113.7	133.4	165.3	222.1	220.6	188.8	137.2
85°	75.8	70.5	68.2	70.5	72.8	75.8	107.7	158.4	167.5	101.6	90.2
87.5°	31.8	31.1	27.3	29.6	32.6	31.8	43.2	67.5	94.0	63.7	58.4
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)