

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: P198945

Luminaire Tested: **XNV2-AF-02-LED-U-T3R-7050-1200**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198945
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-7050-1200
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 5000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE III
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 13454 lumens
Efficiency: N/A
Efficacy: 105.1 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): 128
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

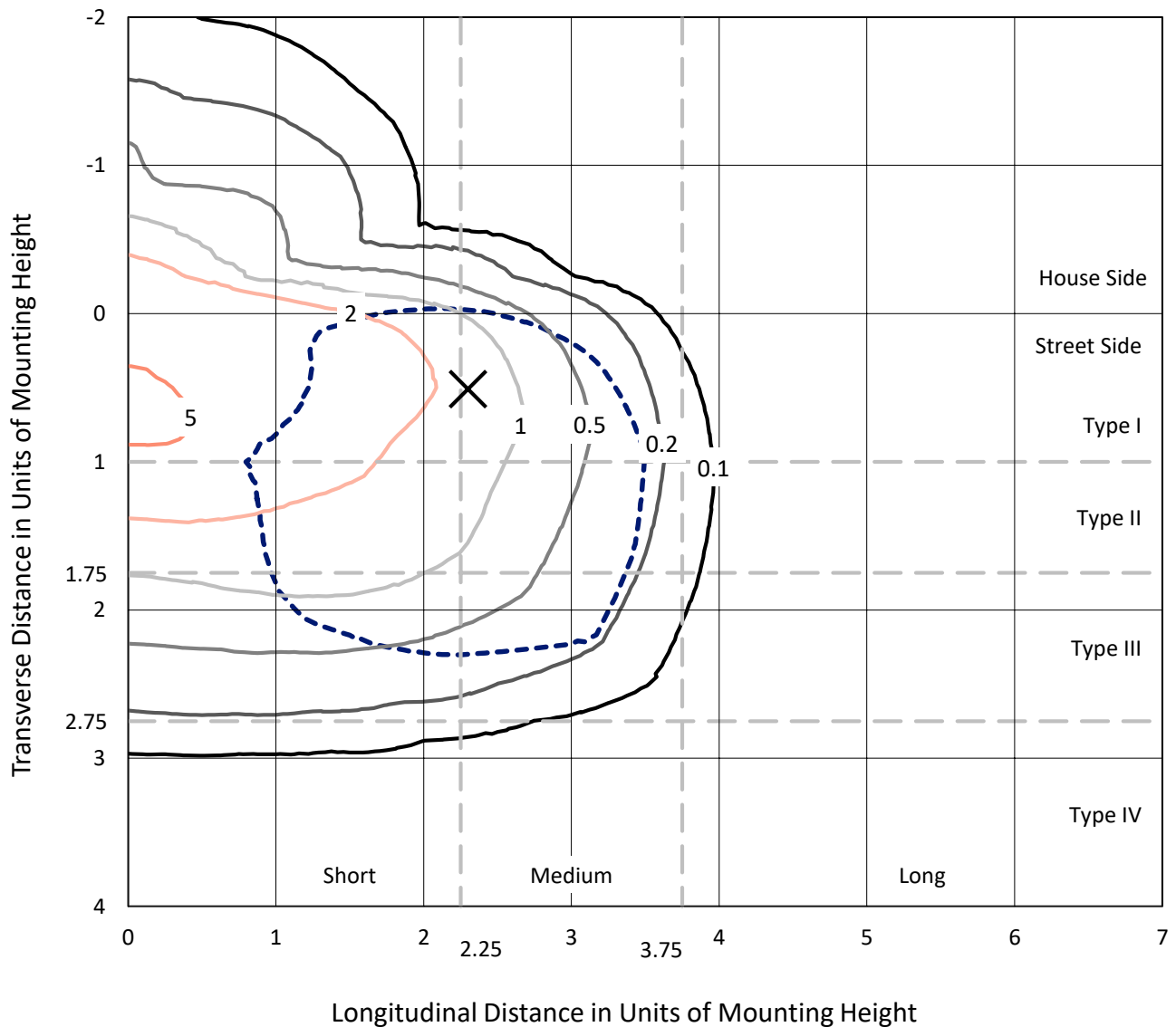


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Iso-Footcandle Lines of Horizontal Illumination

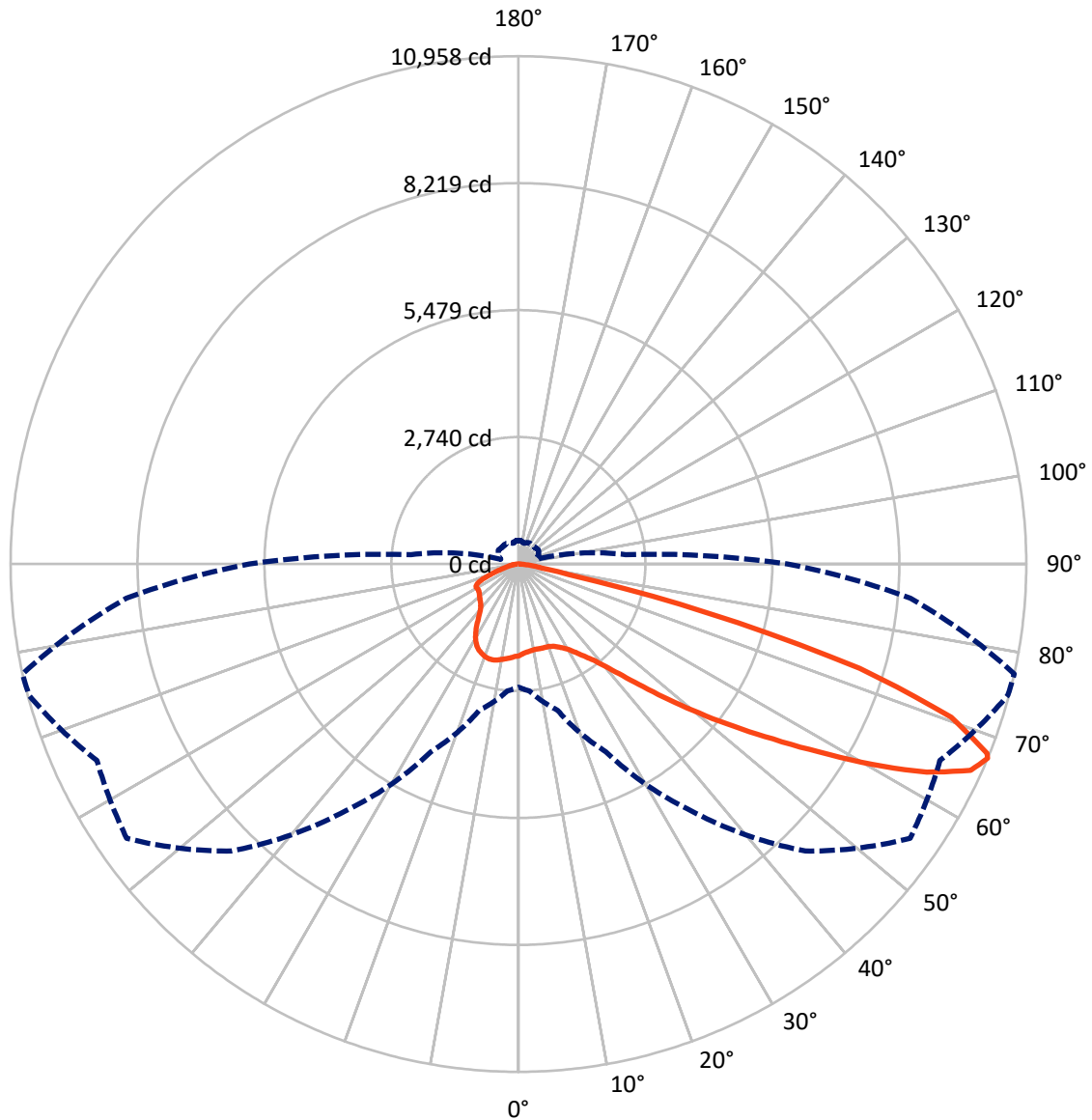
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6 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	2312.1	0.0	2312.1
	% Fixture	17.2	0.0	17.2
Street Side	Lumens	11141.9	0.0	11141.9
	% Fixture	82.8	0.0	82.8
Total	Lumens	13454.0	0.0	13454.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	176.4	1.3
10°-20°	488.4	3.6
20°-30°	829.8	6.2
30°-40°	1327.5	9.9
40°-50°	2043.7	15.2
50°-60°	2835.5	21.1
60°-70°	3782.3	28.1
70°-80°	1800.0	13.4
80°-90°	170.4	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°	13454.0	100.0
0°-180°	13454.0	100.0

Coefficient of Utilization



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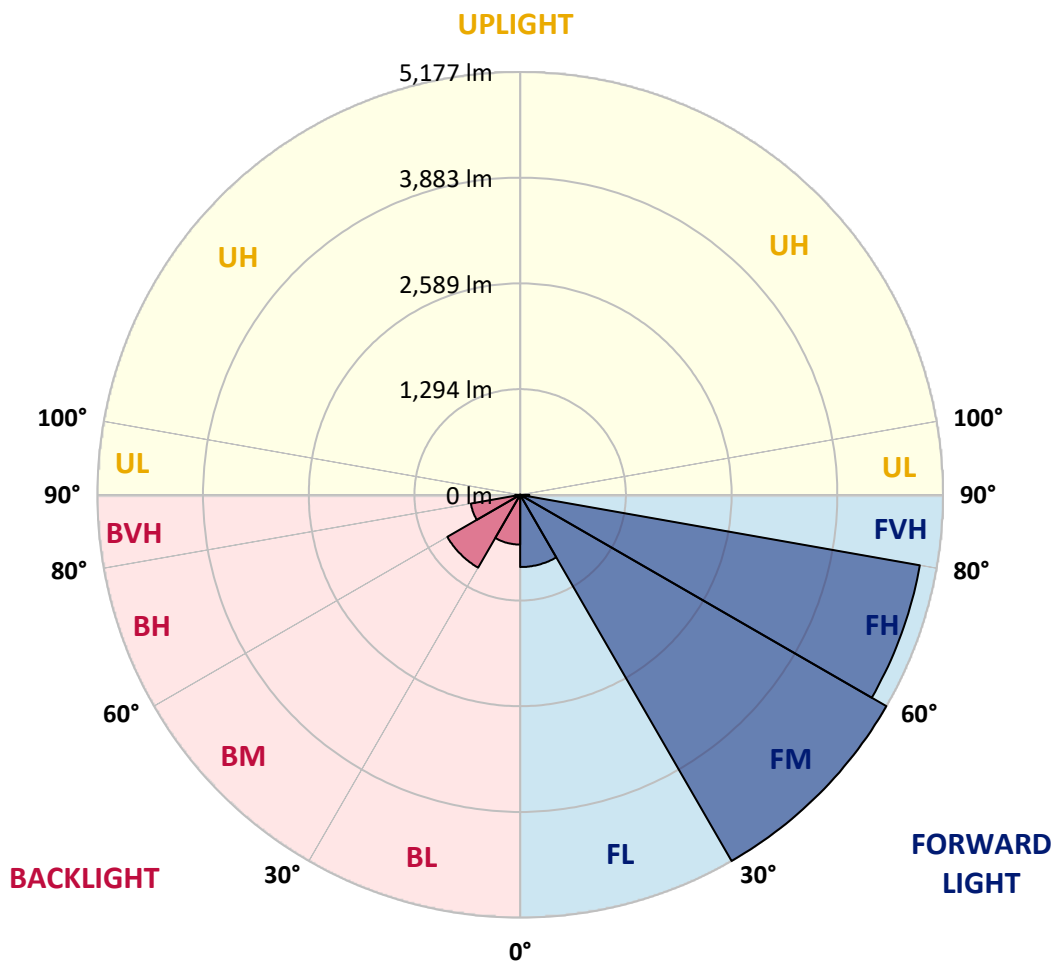
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	884.7	6.6			
FM	(30°-60°)	5177.2	38.5			
FH	(60°-80°)	4969.3	36.9			G2/5000
FVH	(80°-90°)	110.7	0.8			G2/225
BL	(0°-30°)	609.8	4.5	B2/1000		
BM	(30°-60°)	1029.5	7.7	B2/2500		
BH	(60°-80°)	613.0	4.6	B2/1000		G2/1000
BVH	(80°-90°)	59.7	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°	1980.1	1980.1	1980.1	1980.1	1980.1	1980.1	1980.1	1980.1	1980.1	1980.1	1980.1
2.5°	1775.5	1783.8	1784.6	1808.8	1819.6	1847.0	1877.0	1903.6	1926.9	1935.2	1950.1
5°	1597.5	1597.5	1600.0	1615.8	1646.6	1690.7	1753.0	1821.2	1892.8	1910.2	1954.3
7.5°	1504.4	1506.1	1507.7	1523.5	1547.6	1586.7	1649.1	1742.2	1861.2	1890.3	1967.6
10°	1512.7	1510.2	1501.9	1498.6	1508.5	1533.5	1587.6	1683.2	1834.5	1879.4	1991.7
12.5°	1643.3	1638.3	1610.8	1570.9	1534.3	1525.2	1562.6	1653.3	1822.1	1879.4	2032.5
15°	1867.0	1870.3	1816.2	1733.1	1637.4	1572.6	1567.6	1642.4	1817.9	1884.4	2079.9
17.5°	2158.0	2159.7	2084.9	1964.3	1805.4	1671.5	1601.7	1642.4	1817.9	1889.4	2125.6
20°	2467.4	2455.8	2370.9	2219.6	2013.3	1808.8	1664.1	1652.4	1822.9	1896.9	2168.9
22.5°	2732.7	2721.9	2632.9	2474.1	2237.9	1970.9	1748.1	1685.7	1850.3	1927.7	2229.6
25°	2964.7	2971.4	2884.9	2706.1	2461.6	2153.9	1873.6	1762.2	1907.7	1983.4	2304.4
27.5°	3246.6	3234.2	3134.4	2963.9	2691.9	2343.5	2030.8	1858.7	1975.9	2050.8	2395.9
30°	3572.6	3566.8	3432.1	3256.6	2945.6	2555.6	2186.3	1962.6	2064.9	2143.1	2510.6
32.5°	3968.5	3967.6	3822.9	3607.5	3230.8	2795.1	2370.1	2104.8	2194.6	2273.6	2662.8
35°	4416.7	4415.9	4266.2	3981.8	3559.3	3060.3	2586.3	2277.8	2355.1	2438.3	2844.1
37.5°	4727.7	4722.7	4644.6	4368.5	3922.7	3368.9	2856.6	2510.6	2537.3	2630.4	3062.8
40°	4787.6	4817.5	4884.9	4721.9	4319.4	3711.5	3127.7	2761.0	2785.9	2905.7	3338.1
42.5°	4722.7	4761.8	4985.5	5031.3	4716.1	4126.5	3467.0	3107.7	3139.3	3288.2	3661.6
45°	4666.2	4700.3	4980.5	5202.6	5107.8	4578.9	3890.3	3531.0	3590.9	3775.5	4030.8
47.5°	4569.7	4601.3	4882.4	5233.4	5331.5	5014.6	4400.1	4040.0	4143.1	4366.8	4451.6
50°	4564.7	4578.9	4748.5	5130.2	5408.8	5345.6	4964.7	4635.4	4793.4	5051.2	4917.3
52.5°	4438.3	4537.3	4691.1	4965.6	5410.5	5538.6	5521.1	5288.2	5531.9	5817.1	5428.0
55°	3664.9	3778.9	4499.9	4884.9	5400.5	5704.0	6029.2	5982.6	6363.5	6663.7	6000.1
57.5°	3422.1	3470.3	3947.7	4909.0	5483.7	5977.6	6537.3	6728.6	7314.9	7642.5	6686.2
60°	3355.6	3406.3	3837.1	4920.7	5709.0	6475.8	7226.7	7571.0	8433.4	8781.0	7465.4
62.5°	3281.6	3347.3	3845.4	4931.5	6104.9	7212.6	8141.5	8485.0	9581.9	9892.1	8195.6
65°	3065.3	3152.7	3691.5	4863.3	6538.2	8137.4	9350.7	9438.0	10530.7	10727.8	8636.3
67°	2655.3	2751.0	3269.1	4469.1	6498.2	8760.2	10317.8	10034.3	10934.1	10958.2	8493.3
67.5°	2525.6	2624.6	3126.0	4305.3	6384.3	8841.7	10489.2	10116.6	10930.7	10904.1	8360.2
70°	1700.7	1812.1	2213.8	3161.0	5121.1	8228.8	10447.6	9863.0	10213.9	9908.7	7182.7
72.5°	844.1	847.4	1104.4	1731.4	3102.8	5902.0	8715.3	8437.6	8279.6	7703.2	5270.8
75°	406.7	414.1	521.4	765.1	1308.1	3047.0	5943.6	5693.2	4847.5	4197.2	2637.9
77.5°	310.2	317.7	405.0	498.1	545.5	993.8	2943.9	2379.3	1404.6	1121.8	743.5
80°	239.5	253.6	341.8	382.5	360.9	398.3	925.6	728.5	546.4	501.5	368.4
82.5°	187.1	195.4	290.2	290.2	249.5	266.9	430.8	420.8	339.3	306.0	197.9
85°	132.2	148.9	233.7	216.2	163.8	165.5	257.8	247.0	174.6	140.5	77.3
87.5°	59.0	75.7	166.3	141.4	87.3	67.4	105.6	90.6	69.0	53.2	35.8
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°	1980.1	1980.1	1980.1	1980.1	1980.1	1980.1	1980.1	1980.1	1980.1	1980.1	1980.1
2.5°	1966.8	1980.1	2000.9	2013.3	2030.0	2036.6	2043.3	2054.9	2064.1	2061.6	2057.4
5°	1985.1	2007.5	2033.3	2041.6	2041.6	2033.3	2028.3	2029.1	2026.6	2025.0	2020.0
7.5°	2011.7	2042.4	2060.7	2052.4	2026.6	1994.2	1963.4	1945.1	1927.7	1916.9	1920.2
10°	2049.1	2083.2	2084.0	2047.4	1985.9	1915.2	1854.5	1815.4	1778.0	1761.4	1766.4
12.5°	2103.2	2137.3	2108.1	2029.1	1921.0	1810.4	1699.0	1618.3	1546.0	1528.5	1523.5
15°	2161.4	2188.0	2123.1	1990.1	1827.9	1645.8	1458.7	1338.1	1257.4	1243.3	1238.3
17.5°	2212.1	2227.1	2115.6	1920.2	1680.7	1393.8	1175.9	1094.4	1077.8	1086.1	1086.1
20°	2257.0	2252.0	2083.2	1812.1	1448.7	1114.4	988.0	987.1	1009.6	1030.4	1032.0
22.5°	2313.6	2274.5	2031.6	1651.6	1171.7	929.7	908.1	929.7	954.7	978.0	980.5
25°	2380.9	2299.4	1962.6	1422.9	942.2	844.1	853.2	871.5	887.3	905.6	906.5
27.5°	2448.3	2318.5	1865.3	1154.3	817.5	789.2	799.2	806.7	810.8	822.5	822.5
30°	2526.4	2333.5	1724.8	924.8	760.1	741.0	735.1	731.8	735.1	750.9	751.8
32.5°	2624.6	2360.1	1532.7	793.4	733.5	706.9	676.9	660.3	671.9	700.2	705.2
35°	2736.0	2391.7	1302.3	741.0	724.3	690.2	635.4	609.6	613.7	639.5	643.7
37.5°	2875.7	2432.5	1075.3	728.5	733.5	688.6	616.2	579.6	561.3	562.2	561.3
40°	3054.5	2473.2	895.6	731.8	753.4	692.7	607.1	549.7	511.4	513.1	516.4
42.5°	3241.6	2499.8	781.7	741.8	777.6	698.6	603.8	520.6	487.3	515.6	541.4
45°	3460.3	2492.4	722.7	750.9	795.9	701.1	591.3	517.3	489.8	574.6	622.9
47.5°	3711.5	2459.9	689.4	755.1	800.8	700.2	582.1	528.1	510.6	657.8	712.7
50°	3984.3	2409.2	662.8	748.5	798.4	696.9	592.1	541.4	518.9	676.1	718.5
52.5°	4282.8	2362.6	635.4	733.5	785.9	686.9	604.6	535.6	495.6	622.9	655.3
55°	4636.3	2351.8	604.6	707.7	765.1	676.1	597.9	517.3	469.9	552.2	572.2
57.5°	5040.4	2419.2	564.7	676.1	736.8	654.5	582.1	507.3	460.7	502.3	513.1
60°	5553.5	2568.0	522.3	642.8	701.9	622.0	568.0	509.8	463.2	494.8	497.3
62.5°	5954.4	2701.9	484.0	602.1	655.3	583.0	553.0	512.3	470.7	504.8	500.6
65°	6099.9	2636.2	436.6	541.4	589.6	539.7	532.2	513.9	470.7	510.6	501.5
67°	5801.3	2322.7	391.7	480.7	527.2	501.5	512.3	507.3	462.4	509.8	494.0
67.5°	5659.1	2212.1	380.0	470.7	510.6	489.8	507.3	504.0	459.9	508.1	489.8
70°	4667.0	1586.7	321.0	395.0	427.5	431.6	476.5	482.3	439.9	477.3	444.1
72.5°	3320.6	992.9	276.9	306.0	345.1	369.2	434.9	453.2	413.3	415.0	387.5
75°	1643.3	533.1	247.0	236.2	268.6	307.7	379.2	413.3	374.2	346.0	336.8
77.5°	554.7	301.9	208.7	190.4	208.7	247.0	314.4	360.9	330.2	292.7	286.9
80°	286.9	219.5	163.0	153.0	164.7	191.3	246.2	300.2	281.9	283.6	233.7
82.5°	178.8	133.9	117.3	116.4	124.7	146.4	181.3	243.7	242.0	207.1	150.5
85°	83.2	77.3	74.8	77.3	79.8	83.2	118.1	173.8	183.8	111.4	99.0
87.5°	34.9	34.1	29.9	32.4	35.8	34.9	47.4	74.0	103.1	69.9	64.0
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)