

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: P198785

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P198785
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-1200
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 4000K, 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: 13762.8 lumens
Efficiency: N/A
Efficacy: 107.5 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 - G3

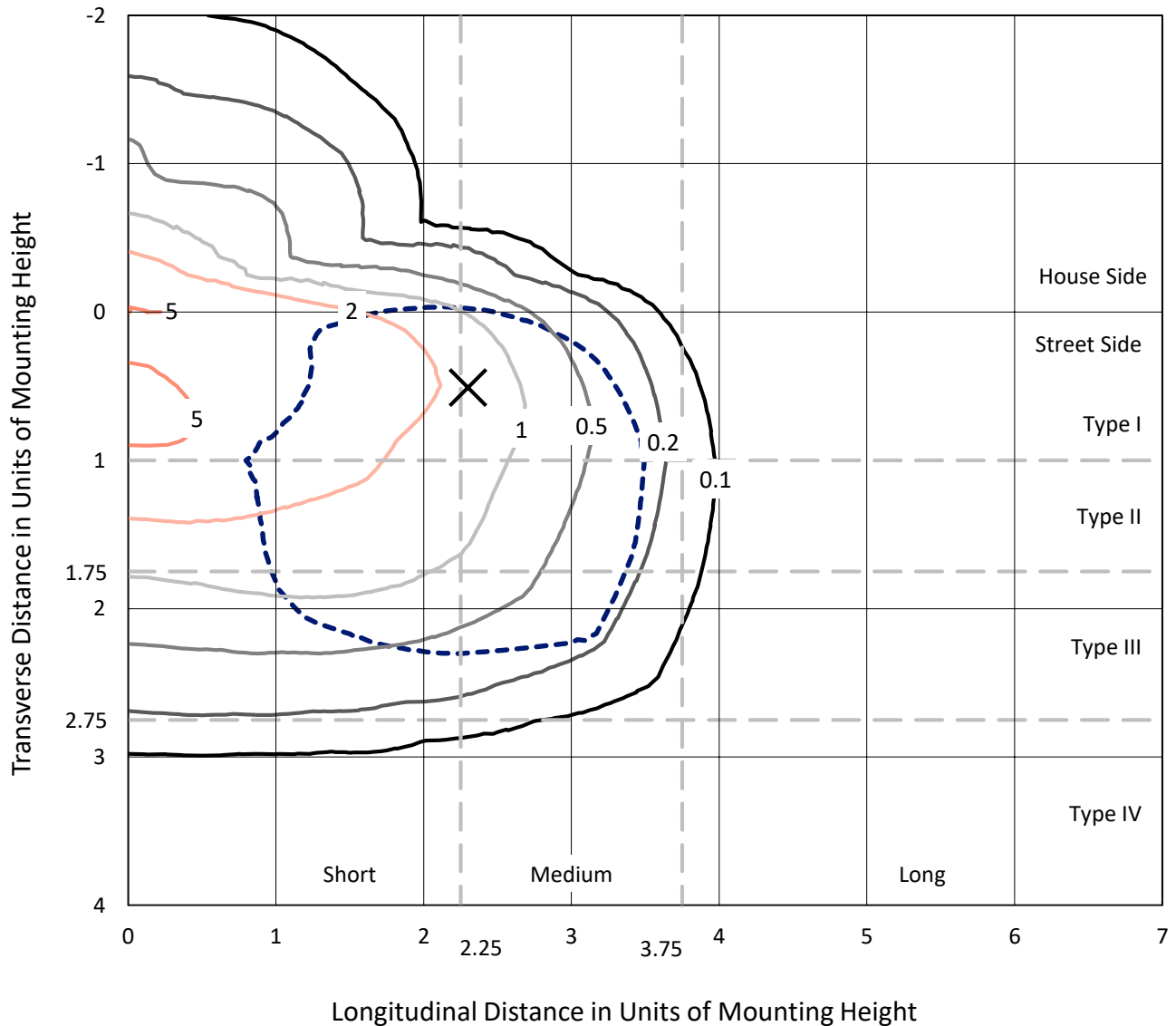
Input Watts (W): 128
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

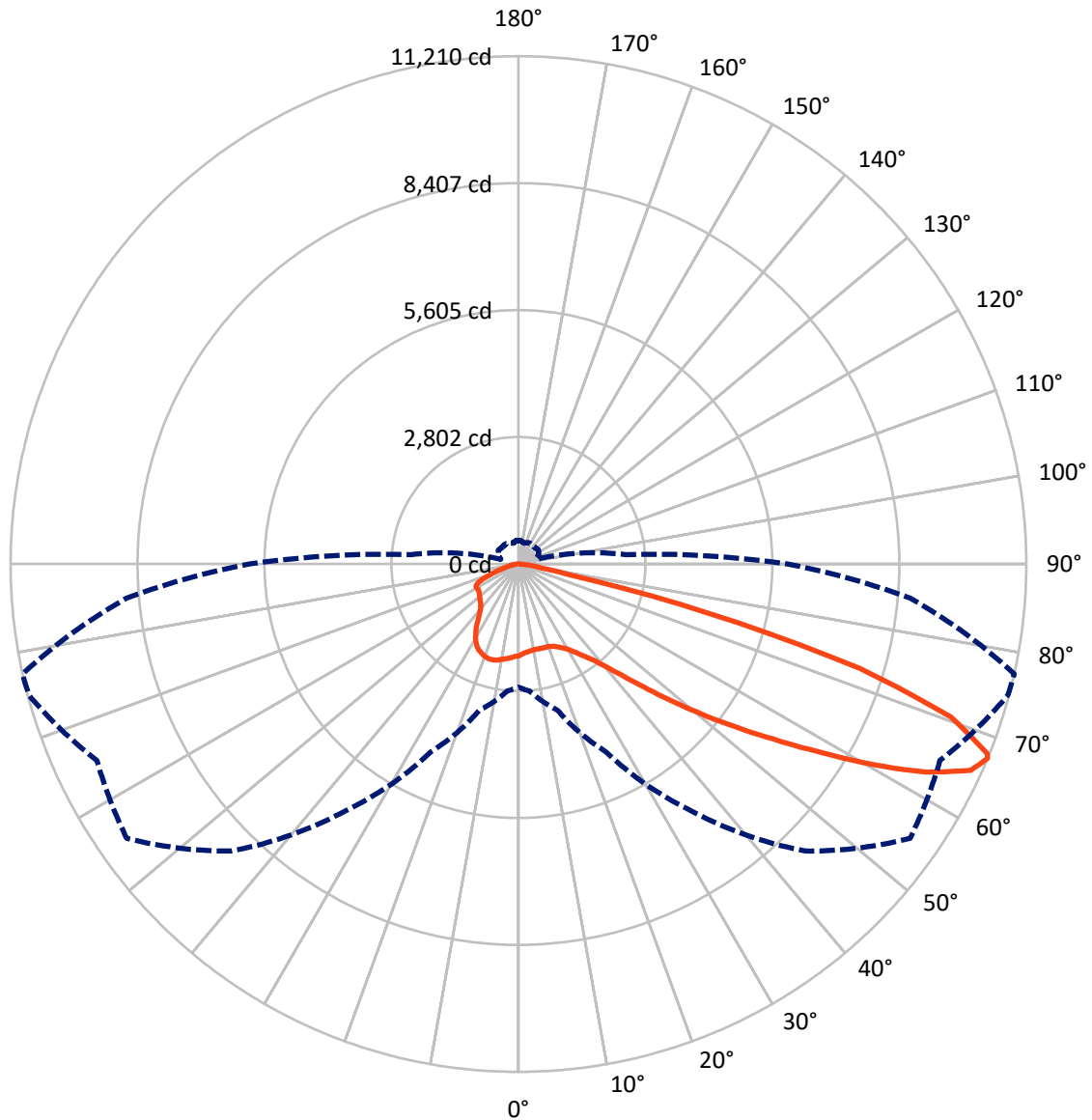
× Max cd
 - - - 1/2 Max cd



Based on 20 foot mounting height. Maximum calculated value = 6.1 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	2365.1	0.0	2365.1
	% Fixture	17.2	0.0	17.2
Street Side	Lumens	11397.6	0.0	11397.6
	% Fixture	82.8	0.0	82.8
Total	Lumens	13762.8	0.0	13762.8
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	180.4	1.3
10°-20°	499.6	3.6
20°-30°	848.9	6.2
30°-40°	1358.0	9.9
40°-50°	2090.6	15.2
50°-60°	2900.5	21.1
60°-70°	3869.1	28.1
70°-80°	1841.3	13.4
80°-90°	174.3	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°	13762.8	100.0
0°-180°	13762.8	100.0

Coefficient of Utilization



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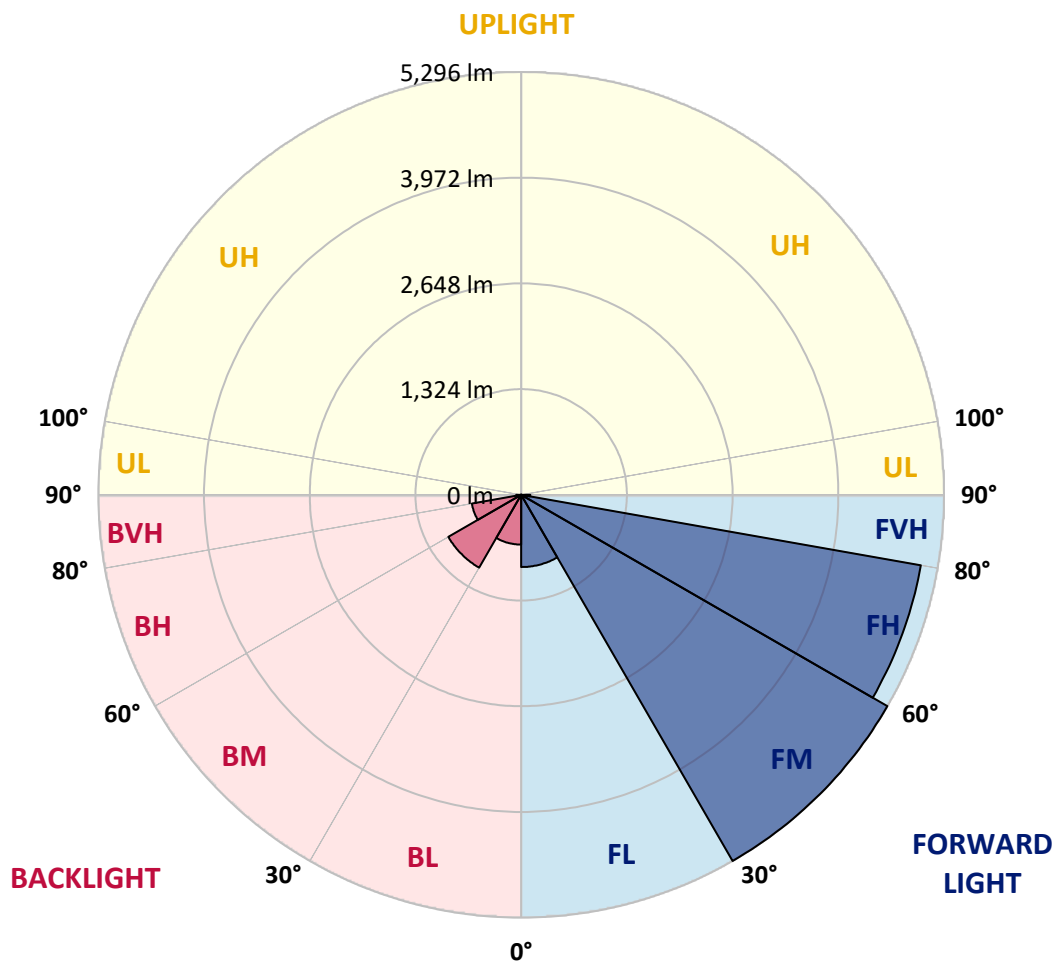
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	905.0	6.6			
FM	(30°-60°)	5296.1	38.5			
FH	(60°-80°)	5083.3	36.9			G3/7500
FVH	(80°-90°)	113.2	0.8			G2/225
BL	(0°-30°)	623.8	4.5	B2/1000		
BM	(30°-60°)	1053.1	7.7	B2/2500		
BH	(60°-80°)	627.1	4.6	B2/1000		G2/1000
BVH	(80°-90°)	61.1	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-G3

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	77.5°	85°
0°	2025.5	2025.5	2025.5	2025.5	2025.5	2025.5	2025.5	2025.5	2025.5	2025.5	2025.5
2.5°	1816.2	1824.7	1825.6	1850.3	1861.4	1889.4	1920.1	1947.3	1971.1	1979.6	1994.9
5°	1634.2	1634.2	1636.7	1652.9	1684.4	1729.5	1793.2	1863.0	1936.2	1954.0	1999.2
7.5°	1538.9	1540.7	1542.3	1558.5	1583.1	1623.1	1686.9	1782.2	1903.9	1933.7	2012.8
10°	1547.4	1544.9	1536.4	1533.0	1543.1	1568.7	1624.0	1721.8	1876.6	1922.5	2037.4
12.5°	1681.0	1675.9	1647.8	1607.0	1569.5	1560.2	1598.5	1691.2	1863.9	1922.5	2079.1
15°	1909.8	1913.2	1857.9	1772.9	1675.0	1608.7	1603.6	1680.1	1859.6	1927.6	2127.6
17.5°	2207.5	2209.3	2132.8	2009.4	1846.8	1709.9	1638.5	1680.1	1859.6	1932.8	2174.4
20°	2524.0	2512.2	2425.3	2270.5	2059.5	1850.3	1702.3	1690.3	1864.7	1940.4	2218.7
22.5°	2795.4	2784.4	2693.3	2530.9	2289.3	2016.1	1788.2	1724.4	1892.8	1971.9	2280.8
25°	3032.7	3039.6	2951.1	2768.2	2518.1	2203.3	1916.6	1802.6	1951.5	2028.9	2357.3
27.5°	3321.1	3308.4	3206.3	3031.9	2753.7	2397.3	2077.4	1901.4	2021.2	2097.9	2450.9
30°	3654.6	3648.7	3510.9	3331.3	3013.2	2614.3	2236.5	2007.6	2112.3	2192.3	2568.2
32.5°	4059.6	4058.7	3910.6	3690.3	3304.9	2859.2	2424.5	2153.1	2245.0	2325.8	2723.9
35°	4518.1	4517.2	4364.1	4073.2	3641.0	3130.5	2645.7	2330.1	2409.2	2494.3	2909.4
37.5°	4836.2	4831.1	4751.2	4468.8	4012.7	3446.2	2922.2	2568.2	2595.5	2690.8	3133.1
40°	4897.5	4928.1	4997.0	4830.3	4418.5	3796.7	3199.5	2824.4	2849.8	2972.4	3414.7
42.5°	4831.1	4871.1	5099.9	5146.8	4824.3	4221.2	3546.6	3179.0	3211.3	3363.7	3745.6
45°	4773.3	4808.2	5094.8	5322.0	5225.0	4684.0	3979.6	3612.0	3673.3	3862.2	4123.3
47.5°	4674.6	4706.9	4994.5	5353.5	5453.9	5129.7	4501.1	4132.7	4238.2	4467.0	4553.8
50°	4669.5	4684.0	4857.5	5247.9	5532.9	5468.3	5078.6	4741.8	4903.4	5167.1	5030.2
52.5°	4540.2	4641.4	4798.8	5079.6	5534.7	5665.7	5647.8	5409.6	5658.9	5950.6	5552.6
55°	3749.0	3865.6	4603.2	4997.0	5524.4	5834.9	6167.6	6119.9	6509.5	6816.6	6137.8
57.5°	3500.6	3549.9	4038.3	5021.7	5609.6	6114.8	6687.3	6883.0	7482.8	7817.9	6839.7
60°	3432.6	3484.5	3925.2	5033.6	5840.0	6624.4	7392.6	7744.8	8627.0	8982.5	7636.7
62.5°	3356.9	3424.1	3933.7	5044.7	6245.0	7378.1	8328.4	8679.7	9801.8	10119.1	8383.7
65°	3135.7	3225.1	3776.2	4974.9	6688.3	8324.2	9565.3	9654.6	10772.4	10974.0	8834.5
67°	2716.2	2814.1	3344.1	4571.7	6647.3	8961.3	10554.6	10264.6	11185.0	11209.7	8688.2
67.5°	2583.6	2684.8	3197.7	4404.1	6530.8	9044.6	10729.9	10348.8	11181.6	11154.4	8552.1
70°	1739.7	1853.7	2264.6	3233.5	5238.6	8417.7	10687.4	10089.4	10448.3	10136.1	7347.5
72.5°	863.5	866.8	1129.7	1771.1	3174.0	6037.5	8915.3	8631.2	8469.6	7880.0	5391.8
75°	416.0	423.6	533.4	782.7	1338.1	3116.9	6080.0	5823.9	4958.8	4293.5	2698.4
77.5°	317.3	325.0	414.3	509.5	558.0	1016.6	3011.5	2433.9	1436.8	1147.5	760.6
80°	245.0	259.4	349.6	391.3	369.2	407.4	946.8	745.2	558.9	513.0	376.9
82.5°	191.4	199.9	296.9	296.9	255.2	273.0	440.7	430.5	347.1	313.0	202.4
85°	135.2	152.3	239.1	221.2	167.6	169.3	263.7	252.7	178.6	143.7	79.1
87.5°	60.4	77.4	170.1	144.6	89.3	68.9	108.0	92.7	70.6	54.4	36.6
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°	2025.5	2025.5	2025.5	2025.5	2025.5	2025.5	2025.5	2025.5	2025.5	2025.5	2025.5
2.5°	2011.9	2025.5	2046.8	2059.5	2076.6	2083.3	2090.2	2102.1	2111.5	2108.9	2104.6
5°	2030.7	2053.6	2080.0	2088.5	2088.5	2080.0	2074.9	2075.7	2073.1	2071.5	2066.4
7.5°	2057.9	2089.3	2108.0	2099.5	2073.1	2040.0	2008.5	1989.7	1971.9	1960.9	1964.3
10°	2096.1	2131.0	2131.8	2094.4	2031.5	1959.2	1897.1	1857.1	1818.8	1801.8	1806.9
12.5°	2151.5	2186.4	2156.5	2075.7	1965.1	1852.0	1738.0	1655.4	1581.5	1563.6	1558.5
15°	2211.0	2238.2	2171.8	2035.8	1869.9	1683.6	1492.2	1368.8	1286.3	1271.8	1266.7
17.5°	2262.9	2278.2	2164.2	1964.3	1719.3	1425.8	1202.9	1119.5	1102.5	1111.0	1111.0
20°	2308.8	2303.7	2131.0	1853.7	1481.9	1140.0	1010.7	1009.8	1032.8	1054.0	1055.7
22.5°	2366.7	2326.7	2078.2	1689.5	1198.6	951.0	928.9	951.0	976.6	1000.4	1003.0
25°	2435.5	2352.2	2007.6	1455.6	963.8	863.5	872.8	891.5	907.7	926.4	927.3
27.5°	2504.5	2371.7	1908.1	1180.8	836.3	807.3	817.5	825.2	829.4	841.4	841.4
30°	2584.4	2387.1	1764.4	946.0	777.5	758.0	752.0	748.6	752.0	768.1	769.1
32.5°	2684.8	2414.3	1567.9	811.6	750.3	723.1	692.4	675.5	687.3	716.3	721.4
35°	2798.8	2446.6	1332.2	758.0	740.9	706.0	650.0	623.6	627.8	654.2	658.5
37.5°	2941.7	2488.3	1100.0	745.2	750.3	704.4	630.3	592.9	574.2	575.1	574.2
40°	3124.6	2530.0	916.2	748.6	770.7	708.6	621.0	562.3	523.1	524.9	528.3
42.5°	3316.0	2557.2	799.6	758.8	795.4	714.6	617.7	532.5	498.5	527.4	553.8
45°	3539.7	2549.6	739.3	768.1	814.2	717.2	604.9	529.2	501.0	587.8	637.2
47.5°	3796.7	2516.4	705.2	772.4	819.2	716.3	595.5	540.2	522.3	672.9	729.1
50°	4075.7	2464.5	678.0	765.7	816.7	712.9	605.7	553.8	530.8	691.6	735.0
52.5°	4381.1	2416.8	650.0	750.3	803.9	702.7	618.5	547.9	507.0	637.2	670.3
55°	4742.7	2405.8	618.5	723.9	782.7	691.6	611.6	529.2	480.7	564.9	585.3
57.5°	5156.1	2474.7	577.7	691.6	753.7	669.5	595.5	518.9	471.3	513.8	524.9
60°	5681.0	2626.9	534.3	657.6	718.0	636.3	581.0	521.5	473.8	506.2	508.7
62.5°	6091.1	2763.9	495.1	615.9	670.3	596.4	565.7	524.1	481.5	516.4	512.1
65°	6239.9	2696.7	446.6	553.8	603.1	552.1	544.4	525.7	481.5	522.3	513.0
67°	5934.4	2376.0	400.7	491.7	539.3	513.0	524.1	518.9	473.0	521.5	505.3
67.5°	5789.0	2262.9	388.7	481.5	522.3	501.0	518.9	515.6	470.5	519.8	501.0
70°	4774.1	1623.1	328.4	404.1	437.3	441.5	487.4	493.4	450.0	488.3	454.3
72.5°	3396.8	1015.7	283.3	313.0	353.0	377.7	444.9	463.6	422.8	424.5	396.4
75°	1681.0	545.3	252.7	241.6	274.8	314.8	387.9	422.8	382.8	353.9	344.5
77.5°	567.4	308.8	213.5	194.8	213.5	252.7	321.6	369.2	337.8	299.4	293.5
80°	293.5	224.5	166.7	156.5	168.5	195.7	251.9	307.1	288.4	290.1	239.1
82.5°	182.9	137.0	120.0	119.1	127.6	149.8	185.5	249.3	247.6	211.9	154.0
85°	85.1	79.1	76.5	79.1	81.6	85.1	120.8	177.8	188.0	114.0	101.3
87.5°	35.7	34.9	30.6	33.1	36.6	35.7	48.5	75.7	105.5	71.5	65.5
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)