

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: P271296

Luminaire Tested: **XNV2-AF-02-LED-U-AFL-7027-800**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P271296
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P24160)
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-AFL-7027-800
Description: XNV2 ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 800mA LIGHTSQUARES WITH 16 LEDS EACH AND AUTOMOTIVE FRONTLINE OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 8672.3 lumens
Efficiency: N/A
Efficacy: 102.0 lumens/watt
Luminous Opening: Rectangular (W 0.5' x L: 1' x H: 0')
IES Classification: Type II - Short - Full Cutoff
BUG Rating: B1 - U0 - G1

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

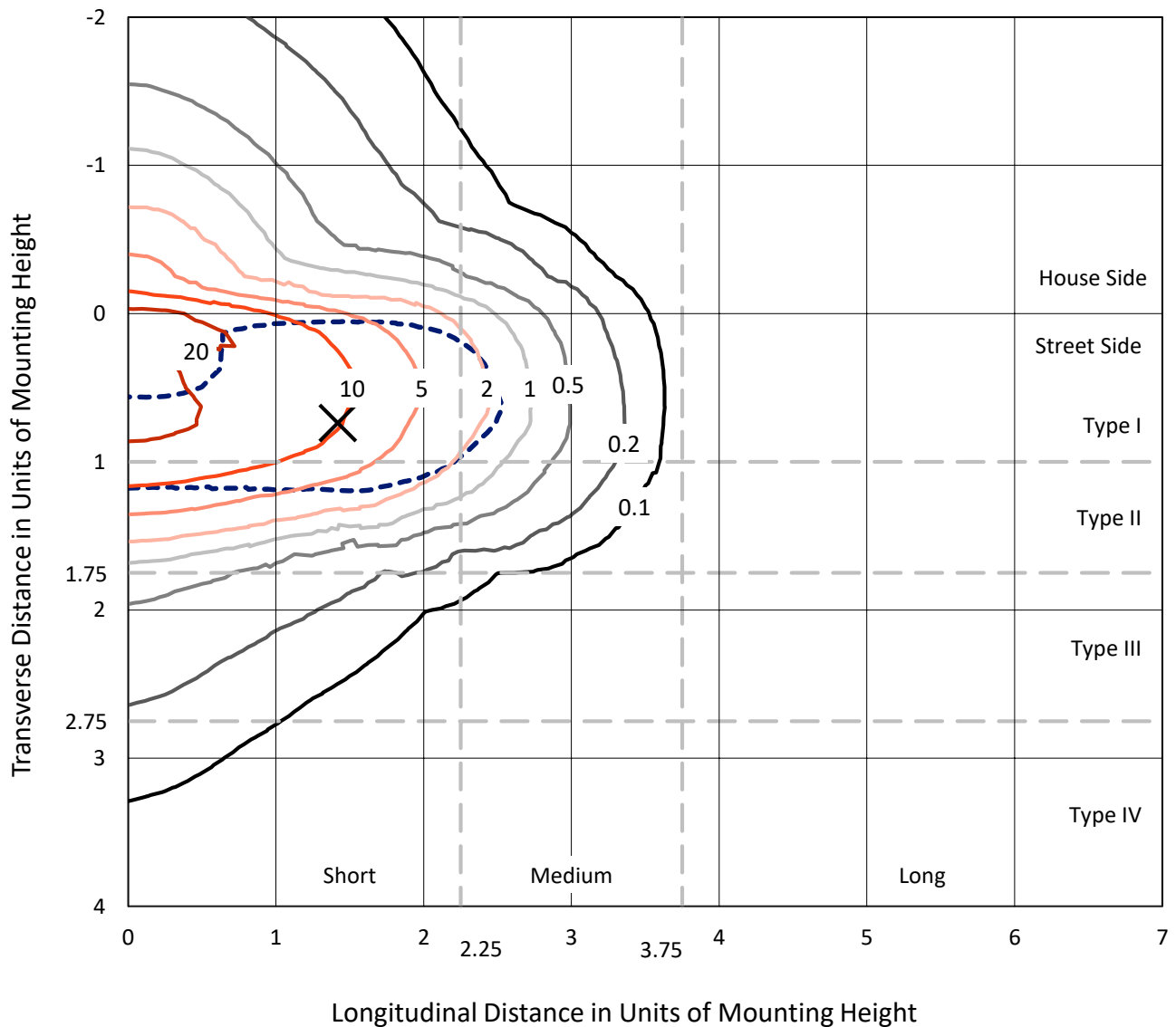


REPORT NUMBER: P271296

CATALOG NUMBER: XNV2-AF-02-LED-U-AFL-7027-800

Iso-Footcandle Lines of Horizontal Illumination

✕ Max cd
 - - - 1/2 Max cd

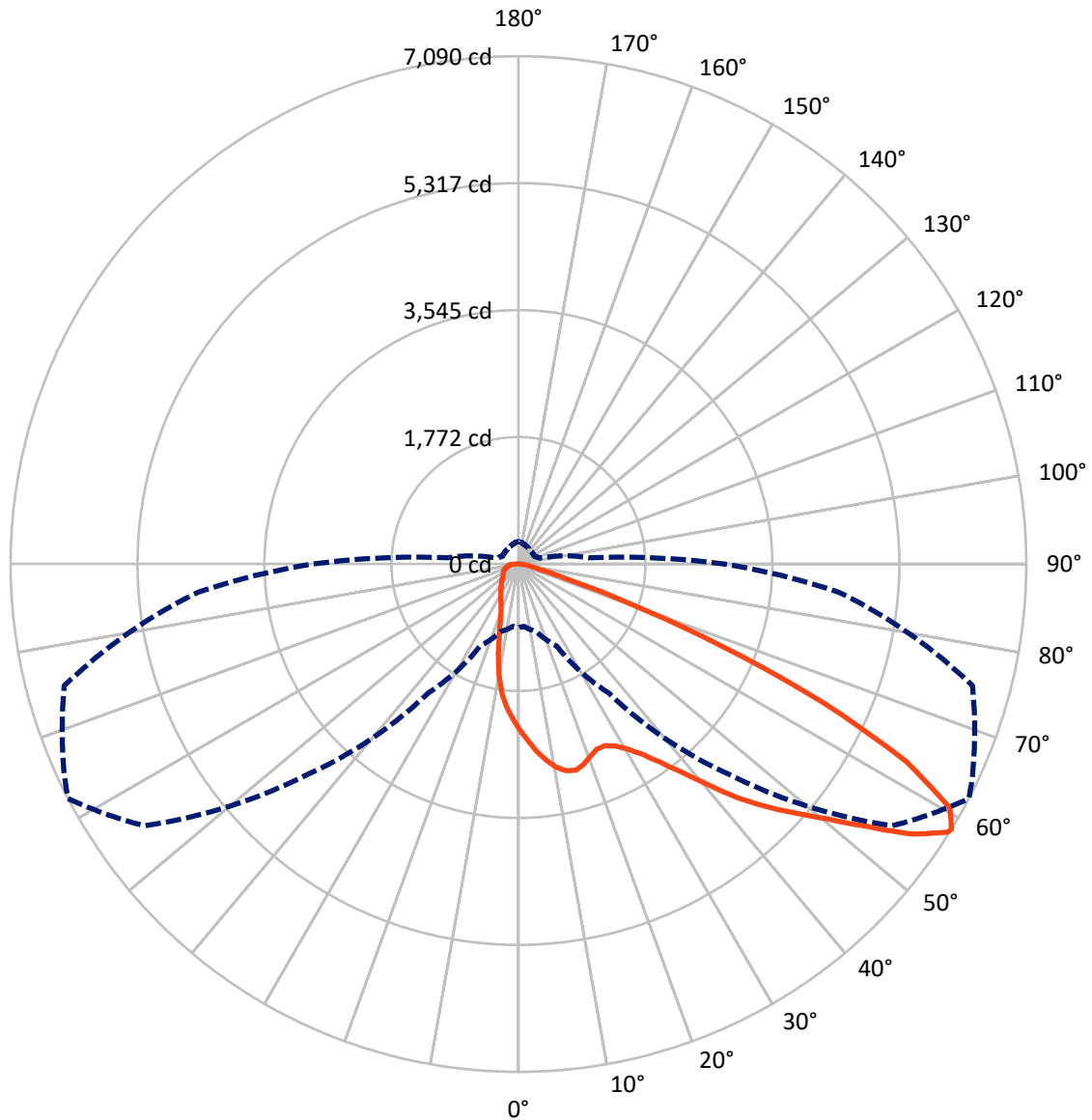


Based on 10 foot mounting height. Maximum calculated value = 27.1 fc
 Type II - Short - Full Cutoff

REPORT NUMBER: P271296

CATALOG NUMBER: XNV2-AF-02-LED-U-AFL-7027-800

Luminous Intensity Polar Plot



— Vertical Plane Through 62.5-Deg Lateral - - - Horizontal Cone Through 58-Deg Vertical

REPORT NUMBER: P271296

CATALOG NUMBER: XNV2-AF-02-LED-U-AFL-7027-800

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1331.5	0.0	1331.5
	% Fixture	15.4	0.0	15.4
Street Side	Lumens	7340.8	0.0	7340.8
	% Fixture	84.6	0.0	84.6
Total	Lumens	8672.3	0.0	8672.3
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	207.0	2.4
10°-20°	522.3	6.0
20°-30°	846.5	9.8
30°-40°	1351.5	15.6
40°-50°	1965.8	22.7
50°-60°	2057.0	23.7
60°-70°	1254.0	14.5
70°-80°	350.7	4.0
80°-90°	117.6	1.4
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°	8672.3	100.0
0°-180°	8672.3	100.0

Coefficient of Utilization



REPORT NUMBER: P271296

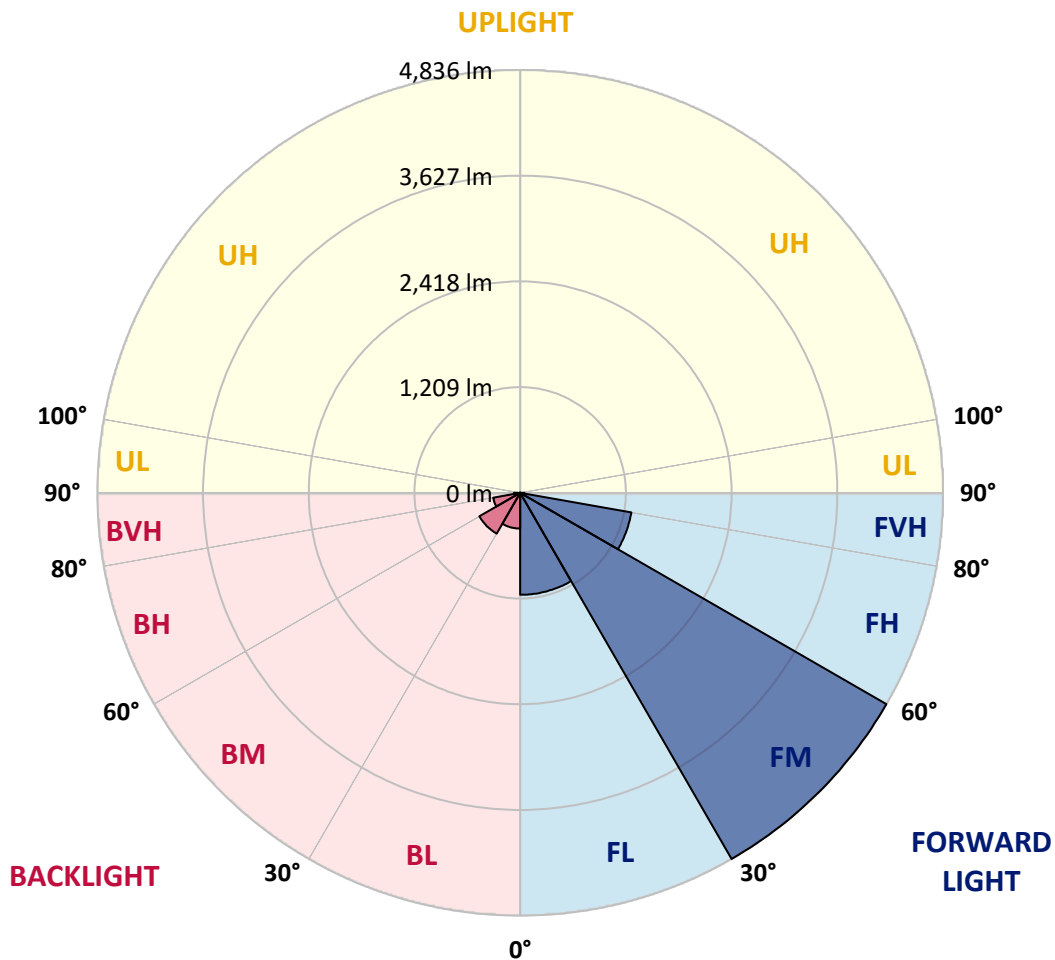
CATALOG NUMBER: XNV2-AF-02-LED-U-AFL-7027-800

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1166.5	13.5			
FM	(30°-60°)	4835.8	55.8			
FH	(60°-80°)	1291.3	14.9			G1/1800
FVH	(80°-90°)	47.3	0.5			G1/100
BL	(0°-30°)	409.3	4.7	B1/500		
BM	(30°-60°)	538.5	6.2	B1/1000		
BH	(60°-80°)	313.5	3.6	B1/500		G1/500
BVH	(80°-90°)	70.3	0.8			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G1

Type II Short





REPORT NUMBER: P271296

CATALOG NUMBER: XNV2-AF-02-LED-U-AFL-7027-800

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	62.5°	65°	75°	85°
0°	2315.6	2315.6	2315.6	2315.6	2315.6	2315.6	2315.6	2315.6	2315.6	2315.6	2315.6
2.5°	2628.3	2626.6	2604.4	2589.8	2572.3	2532.2	2492.2	2462.3	2447.2	2389.2	2332.8
5°	2845.6	2839.1	2826.5	2810.8	2788.1	2737.7	2674.3	2619.5	2597.9	2494.9	2391.4
7.5°	2730.7	2741.0	2779.4	2822.7	2868.3	2871.5	2826.5	2761.5	2737.7	2600.1	2448.3
10°	2412.5	2408.1	2456.3	2540.9	2691.1	2839.6	2913.8	2881.9	2856.9	2699.8	2505.2
12.5°	2316.0	2314.9	2323.0	2344.8	2439.1	2642.9	2891.6	2961.1	2952.3	2805.4	2565.9
15°	2345.3	2346.4	2345.8	2348.4	2374.5	2471.5	2767.5	2987.6	3014.6	2910.1	2627.6
17.5°	2439.1	2435.2	2423.3	2410.3	2414.1	2448.8	2633.7	2941.9	3023.3	3003.3	2679.7
20°	2583.7	2583.7	2551.7	2515.4	2491.5	2499.3	2577.7	2863.9	2983.2	3082.4	2718.7
22.5°	2765.3	2768.0	2720.8	2654.9	2600.6	2579.9	2609.8	2805.9	2934.5	3155.6	2753.5
25°	2990.7	2990.3	2921.5	2826.5	2741.0	2691.6	2691.1	2808.7	2919.2	3241.3	2789.7
27.5°	3269.9	3244.5	3164.3	3029.3	2908.4	2833.1	2798.8	2877.0	2951.2	3346.4	2838.6
30°	3584.9	3558.8	3453.8	3280.3	3116.6	3006.5	2950.2	2995.2	3048.8	3480.3	2912.2
32.5°	3896.5	3902.4	3778.9	3583.2	3373.0	3217.9	3134.5	3162.0	3199.6	3644.0	3011.9
35°	4352.8	4352.4	4190.9	3946.3	3696.5	3481.9	3376.2	3390.8	3425.0	3874.7	3151.9
37.5°	4693.3	4687.9	4583.8	4367.5	4086.2	3828.8	3676.0	3678.1	3707.3	4164.8	3336.0
40°	4728.0	4726.9	4726.3	4695.4	4503.1	4260.2	4068.9	4029.3	4041.3	4472.8	3531.7
42.5°	4462.9	4502.5	4616.3	4790.8	4844.5	4717.1	4536.1	4447.8	4421.6	4826.1	3738.7
45°	4085.1	4105.2	4304.7	4697.1	5016.2	5146.4	5010.3	4823.9	4779.4	5169.7	3907.4
47.5°	3909.6	3900.8	4016.3	4443.9	4999.4	5487.8	5497.5	5191.9	5116.6	5466.1	4050.9
50°	3532.9	3521.4	3667.2	4071.6	4816.4	5657.4	5997.9	5592.9	5453.7	5748.1	4181.2
52.5°	2782.1	2771.4	2966.9	3487.8	4406.5	5594.0	6419.6	6085.2	5847.7	6019.5	4302.5
55°	1810.4	1811.4	1997.8	2534.9	3565.9	5224.5	6617.5	6653.7	6387.6	6291.1	4400.5
57.5°	996.8	987.5	1120.4	1450.5	2453.1	4384.8	6452.6	7063.5	6924.8	6524.2	4471.7
58°	886.2	875.4	977.7	1262.4	2199.5	4148.1	6369.7	7089.6	6993.6	6562.7	4481.9
60°	631.5	613.1	597.4	711.6	1267.1	2990.7	5816.9	6920.9	7013.5	6639.6	4472.1
62.5°	532.2	511.1	454.7	450.4	596.7	1462.9	4600.0	6078.1	6337.7	6462.3	4315.0
65°	494.2	473.1	398.8	372.3	404.9	631.5	2844.5	4693.3	5040.1	5846.1	3919.2
67.5°	467.2	442.2	362.6	327.9	334.3	377.7	1207.1	3069.4	3471.6	4558.9	3144.2
70°	442.9	415.1	333.9	293.7	288.4	287.3	471.5	1602.8	1990.3	2983.2	2106.3
72.5°	415.1	388.1	308.4	265.5	253.6	233.1	283.4	662.3	907.8	1462.4	965.3
75°	375.0	352.9	280.2	242.3	221.7	189.2	209.2	317.6	391.3	560.0	448.3
77.5°	330.0	312.3	251.4	222.8	195.1	154.5	159.9	215.1	241.7	315.5	259.6
80°	233.6	240.0	219.5	196.2	171.8	124.7	123.1	157.7	173.5	211.9	174.5
82.5°	160.9	165.8	178.9	155.0	138.8	97.0	90.5	109.6	117.6	127.9	84.5
85°	115.0	111.7	124.1	111.1	101.9	61.9	58.0	69.3	74.3	78.1	40.7
87.5°	69.9	69.3	71.5	57.4	53.1	31.4	28.7	33.1	35.3	34.1	19.6
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: P271296

CATALOG NUMBER: XNV2-AF-02-LED-U-AFL-7027-800

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2315.6	2315.6	2315.6	2315.6	2315.6	2315.6	2315.6	2315.6	2315.6	2315.6	2315.6
2.5°	2311.7	2285.1	2227.1	2180.5	2130.2	2091.7	2053.2	2031.4	2007.6	1994.1	1992.4
5°	2337.1	2283.0	2159.3	2044.5	1926.2	1820.1	1716.0	1639.0	1576.2	1540.5	1538.2
7.5°	2365.3	2280.3	2089.5	1890.6	1680.2	1471.1	1286.3	1155.6	1071.6	1032.5	1029.7
10°	2386.9	2268.8	2004.4	1694.8	1361.6	1085.2	917.1	840.2	814.7	808.1	807.0
12.5°	2413.0	2260.8	1897.0	1443.9	1040.6	826.0	775.1	770.1	775.6	778.9	779.4
15°	2437.5	2245.0	1752.4	1165.9	814.7	738.1	739.3	749.5	760.4	765.4	765.9
17.5°	2448.8	2206.5	1562.1	918.6	712.7	698.6	711.1	724.7	734.5	738.1	738.1
20°	2448.8	2144.8	1341.4	744.2	659.6	662.3	677.5	687.8	690.0	686.8	685.0
22.5°	2438.4	2068.3	1126.8	649.4	616.2	626.6	638.4	631.5	605.9	586.5	582.7
25°	2429.2	1977.8	920.4	591.4	578.2	591.9	587.0	538.8	499.7	479.6	476.5
27.5°	2414.1	1868.4	748.0	543.7	541.5	552.3	504.0	457.4	438.0	427.1	425.0
30°	2410.3	1749.5	625.9	501.3	505.1	489.9	434.7	419.5	415.1	409.2	406.6
32.5°	2422.8	1631.0	549.7	466.7	470.4	420.5	399.4	401.6	401.2	393.5	390.9
35°	2457.0	1515.5	500.9	435.1	424.4	376.7	379.4	385.9	385.9	376.7	373.4
37.5°	2516.5	1408.2	470.0	408.6	371.3	353.9	360.9	369.7	369.7	363.2	360.4
40°	2579.9	1303.5	446.5	387.4	337.7	338.2	345.3	351.7	354.6	355.5	353.5
42.5°	2637.5	1195.1	421.7	364.8	322.5	326.3	329.6	334.3	345.8	353.5	352.3
45°	2671.0	1086.2	394.5	336.5	312.3	313.8	312.7	321.5	335.0	346.3	346.3
47.5°	2701.9	996.8	372.3	308.4	301.9	301.9	298.6	307.3	319.7	333.4	334.3
50°	2731.1	938.8	356.6	286.6	288.9	287.3	286.2	294.4	311.2	327.4	330.0
52.5°	2761.0	919.2	342.6	271.0	275.3	273.2	274.3	285.7	304.6	321.5	324.1
55°	2802.7	931.7	327.9	260.1	262.3	261.8	266.1	279.2	295.9	312.7	313.8
57.5°	2854.3	977.3	315.5	252.1	249.9	253.1	260.1	272.6	288.9	308.9	310.5
58°	2864.5	988.0	313.2	249.9	247.2	252.1	259.2	271.0	287.7	308.9	310.5
60°	2880.2	1026.6	307.8	245.5	238.0	246.7	255.3	267.2	285.7	311.6	314.9
62.5°	2804.4	1034.2	306.2	240.7	228.2	238.9	249.3	262.8	283.4	320.9	327.9
65°	2541.5	956.1	294.9	232.5	220.1	233.1	243.9	259.6	290.0	348.5	351.7
67.5°	2040.1	794.0	267.2	220.1	210.8	226.1	239.6	259.6	292.7	352.9	355.0
70°	1402.8	596.7	232.5	206.5	200.1	217.3	238.0	265.5	283.4	333.9	327.4
72.5°	732.7	415.1	203.7	190.8	186.9	209.8	253.6	259.6	272.6	311.6	305.2
75°	369.2	282.3	179.4	173.0	172.4	207.1	284.0	249.9	261.2	293.2	307.3
77.5°	217.8	221.2	159.9	156.0	158.8	202.2	284.6	240.0	248.2	269.9	285.1
80°	149.1	182.6	144.6	143.5	145.9	185.9	262.3	228.2	233.1	255.3	271.6
82.5°	84.0	100.8	126.8	133.8	132.8	152.4	226.6	207.6	213.5	301.9	319.3
85°	40.7	60.7	106.2	125.3	113.2	101.4	184.3	184.3	185.9	216.2	218.9
87.5°	15.2	27.0	71.5	99.3	79.1	60.7	125.3	130.7	145.3	149.6	152.8
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)