

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: P509109

Luminaire Tested: **VERD-CA2-110-727-U-T2**

Issue Date: 3/4/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P509109  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-139-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 3/4/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VERD-CA2-110-727-U-T2  
Description: VERDEON ROADWAY AND AREA LUMINAIRE  
(2) 70 CRI, 2700K, 1020mA LEDS AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 13534 lumens  
Efficiency: N/A  
Efficacy: 119.1 lumens/watt  
Luminous Opening: Rectangular (W 0.79' x L: 1.25' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B2 - U0 - G2

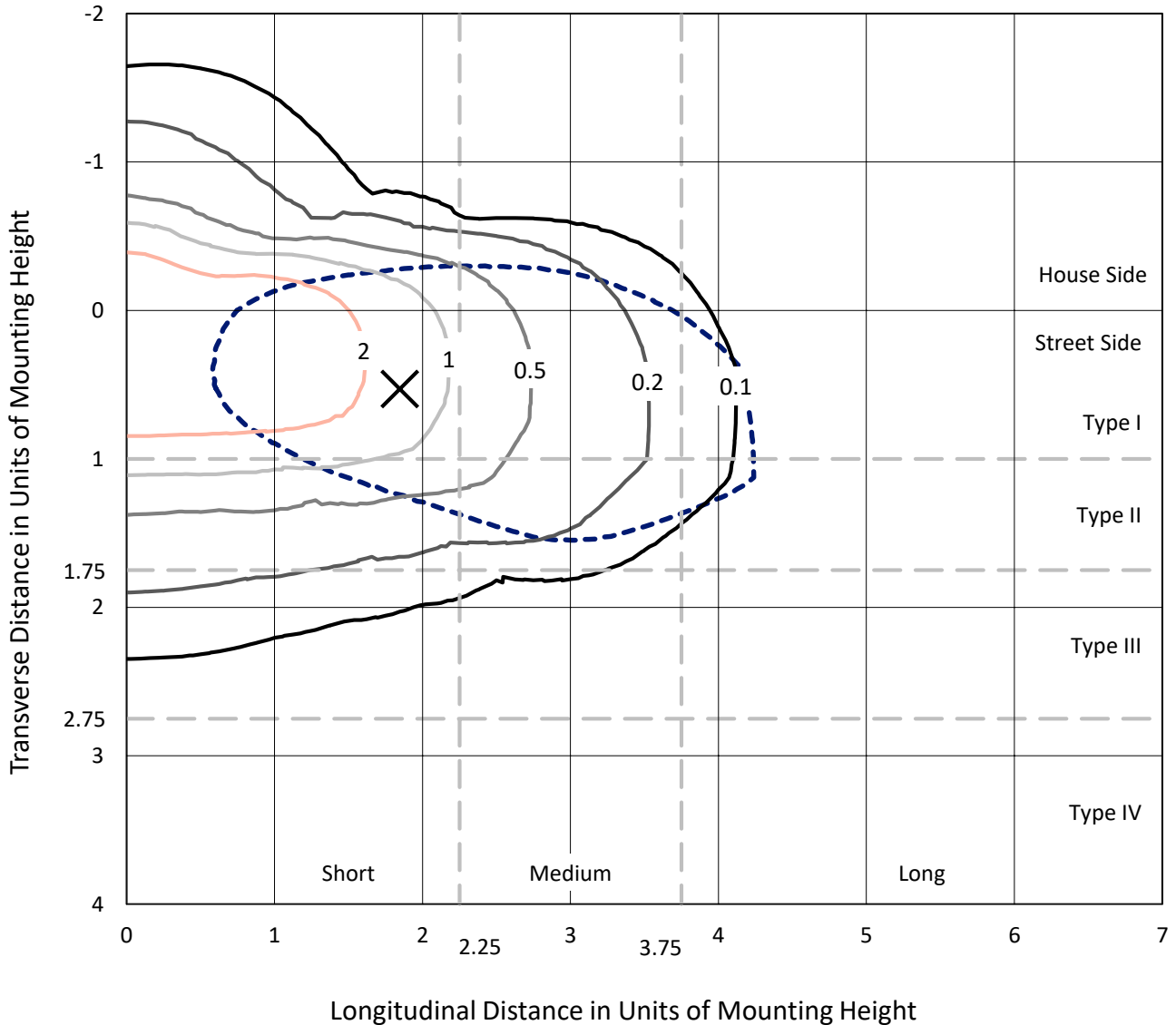
Input Watts (W): 113.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

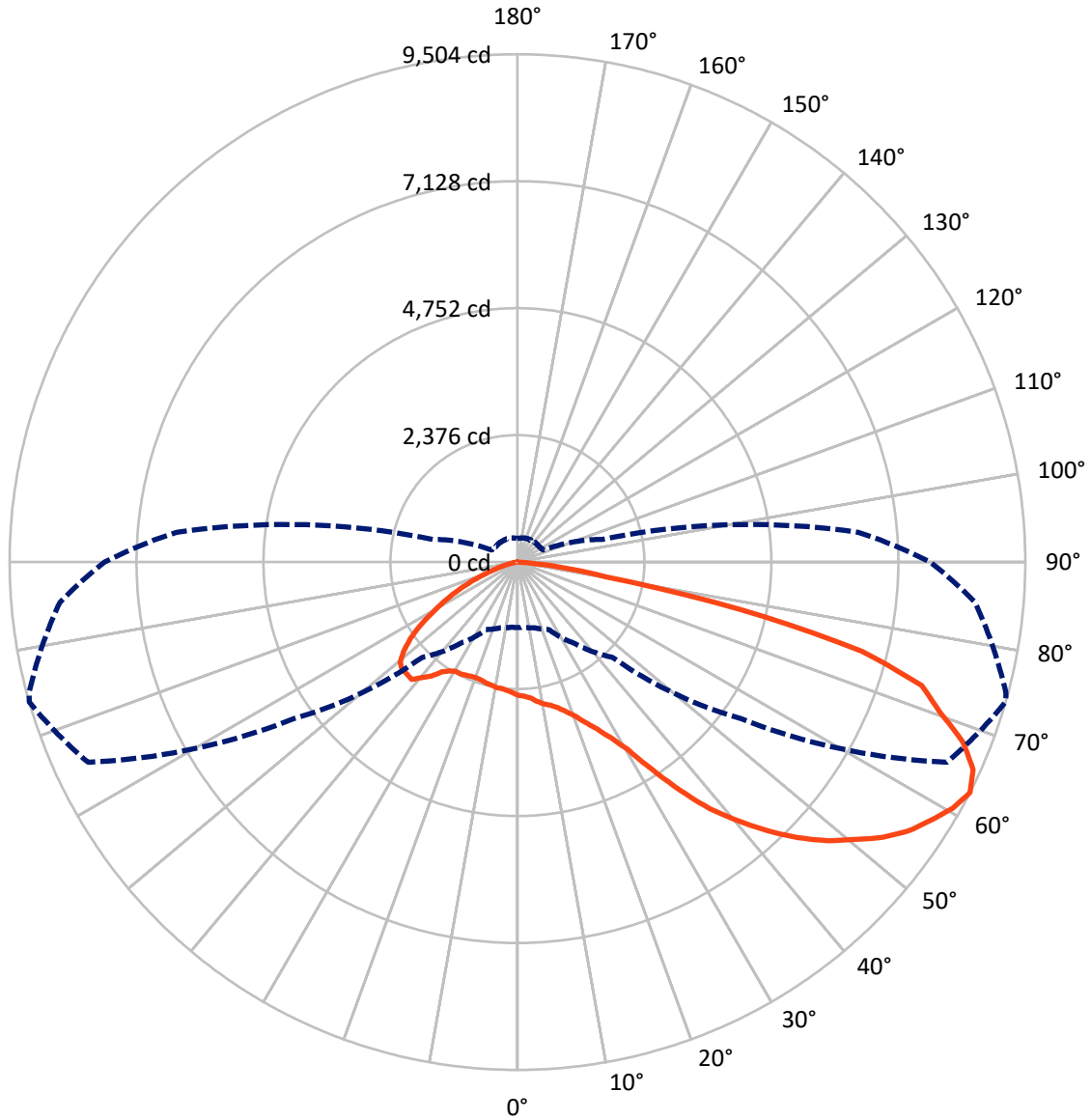
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.7 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 74-Deg Lateral      - - - Horizontal Cone Through 62.5-Deg Vertical

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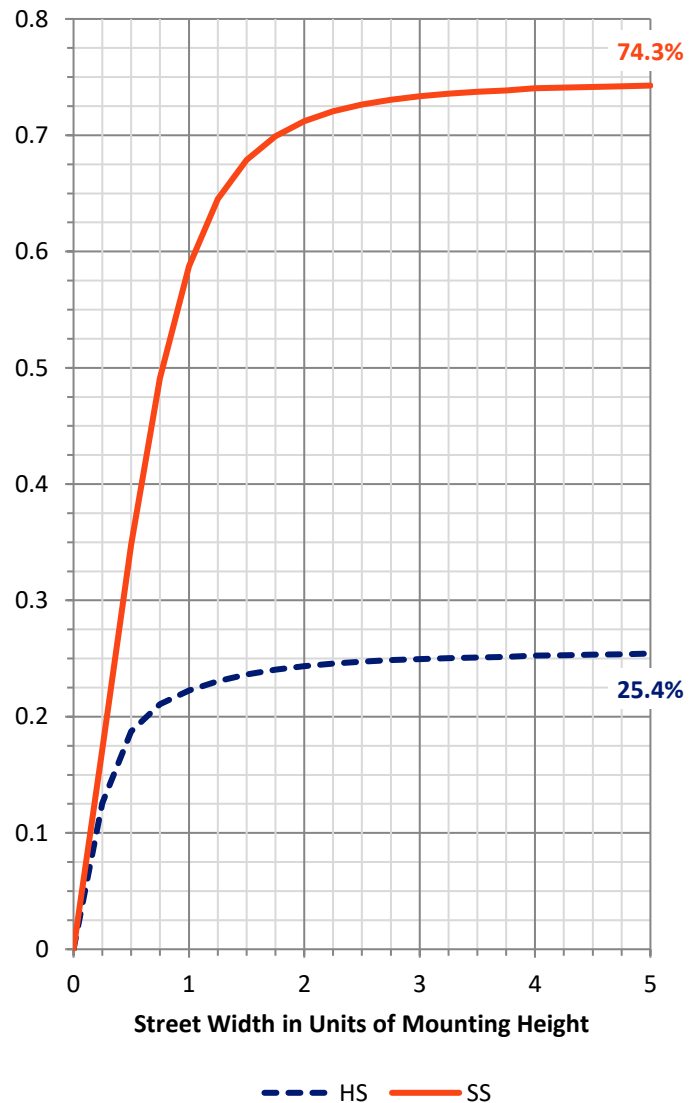
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	3494.6	0.0	3494.6
	% Fixture	25.8	0.0	25.8
<b>Street Side</b>	Lumens	10039.4	0.0	10039.4
	% Fixture	74.2	0.0	74.2
<b>Total</b>	Lumens	13534.0	0.0	13534.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	239.8	1.8
10°-20°	731.1	5.4
20°-30°	1232.8	9.1
30°-40°	1801.2	13.3
40°-50°	2398.4	17.7
50°-60°	2760.1	20.4
60°-70°	2667.2	19.7
70°-80°	1535.4	11.3
80°-90°	168.0	1.2
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°	13534.0	100.0
0°-180°	13534.0	100.0



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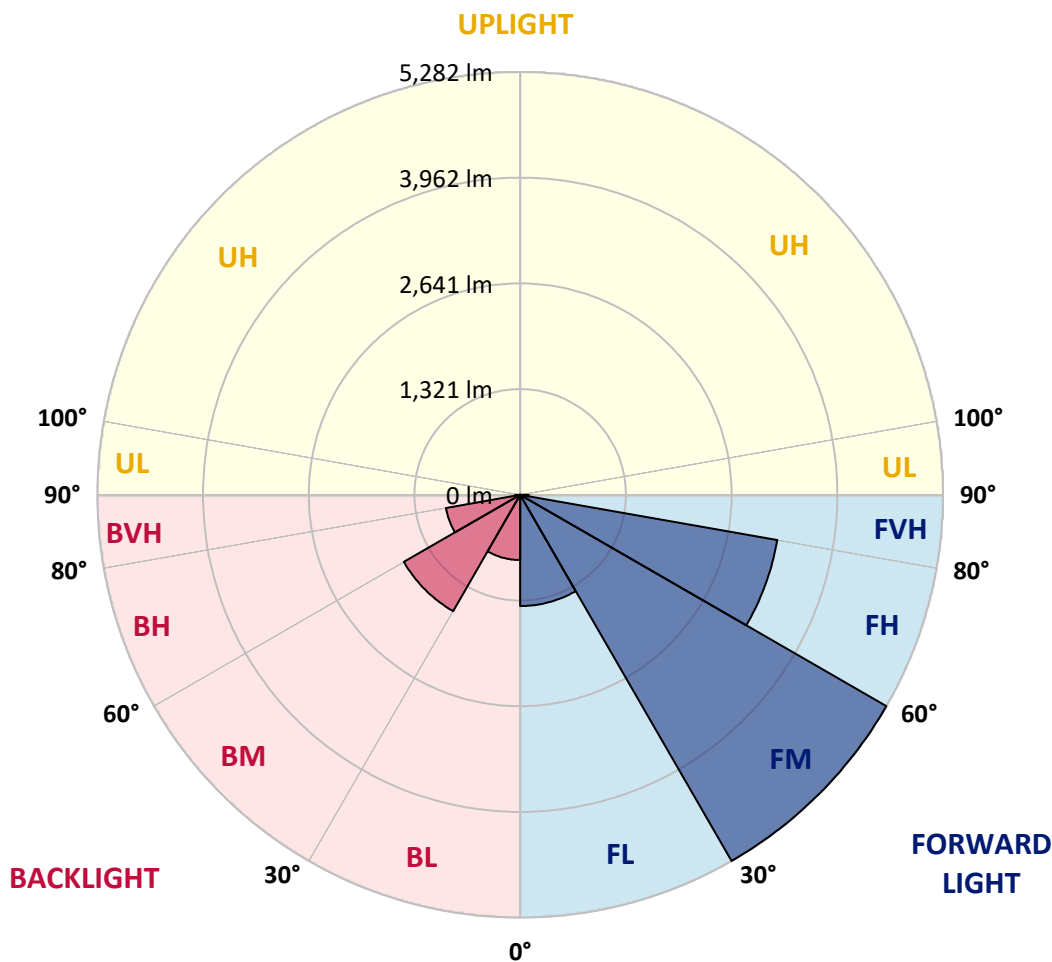
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1389.0	10.3			
FM (30°-60°)	5282.3	39.0			
FH (60°-80°)	3261.8	24.1			G2/5000
FVH (80°-90°)	106.2	0.8			G2/225
BL (0°-30°)	814.7	6.0	B2/1000		
BM (30°-60°)	1677.3	12.4	B2/2500		
BH (60°-80°)	940.8	7.0	B2/1000		G2/1000
BVH (80°-90°)	61.7	0.5			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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	2495.6	2495.6	2495.6	2495.6	2495.6	2495.6	2495.6	2495.6	2495.6	2495.6	2495.6
2.5°	2671.2	2652.0	2640.2	2626.9	2610.7	2604.8	2569.4	2538.4	2513.3	2514.8	2498.6
5°	2768.6	2748.0	2721.4	2717.0	2696.3	2691.9	2657.9	2609.2	2554.6	2547.3	2498.6
7.5°	2877.8	2866.0	2849.8	2829.1	2795.2	2773.1	2724.3	2686.0	2629.9	2622.5	2526.6
10°	3010.7	3001.8	2990.0	2990.0	2945.7	2898.5	2839.5	2743.5	2699.3	2691.9	2575.3
12.5°	3167.1	3140.5	3102.2	3080.0	3038.7	3009.2	2945.7	2843.9	2748.0	2745.0	2621.0
15°	3268.9	3246.8	3221.7	3212.8	3159.7	3111.0	3043.1	2962.0	2827.7	2817.3	2677.1
17.5°	3382.6	3361.9	3332.4	3316.2	3282.2	3226.1	3165.6	3059.4	2939.8	2929.5	2740.6
20°	3446.0	3423.9	3415.0	3418.0	3406.2	3378.1	3305.8	3209.9	3072.6	3059.4	2827.7
22.5°	3516.9	3502.1	3505.1	3527.2	3549.3	3539.0	3482.9	3376.7	3258.6	3237.9	2967.9
25°	3518.3	3506.5	3546.4	3632.0	3679.2	3702.8	3673.3	3586.2	3460.8	3441.6	3146.4
27.5°	3543.4	3525.7	3568.5	3658.5	3801.7	3850.4	3860.7	3828.3	3720.5	3696.9	3360.4
30°	3478.5	3466.7	3531.6	3688.1	3856.3	4018.6	4077.7	4127.8	4067.3	4068.8	3691.0
32.5°	3366.3	3345.7	3444.5	3636.4	3949.3	4170.6	4327.1	4529.3	4622.2	4613.4	4266.6
35°	3152.3	3164.1	3297.0	3590.7	3952.2	4325.6	4632.6	4994.1	5246.5	5240.6	4862.8
37.5°	3000.3	2994.4	3150.9	3462.3	3950.7	4462.9	4929.2	5531.3	5857.5	5848.6	5374.9
40°	2817.3	2818.8	2975.2	3302.9	3881.4	4548.5	5236.2	6040.5	6372.6	6359.3	5864.9
42.5°	2621.0	2626.9	2773.1	3108.1	3785.5	4613.4	5510.7	6555.6	6877.3	6889.1	6257.4
45°	2445.4	2448.4	2593.0	2900.0	3615.7	4620.8	5757.1	7042.6	7355.4	7327.4	6669.2
47.5°	2187.2	2190.1	2404.1	2702.2	3391.4	4560.3	5960.8	7506.0	7792.3	7733.3	7017.5
50°	1713.4	1719.3	1973.2	2497.1	3118.4	4421.5	6121.7	7941.3	8162.7	8137.6	7374.6
52.5°	1582.1	1577.6	1683.9	2252.1	2873.4	4170.6	6223.5	8332.4	8556.8	8553.8	7669.8
55°	1515.7	1511.2	1546.7	1825.6	2632.8	3798.7	6220.5	8636.5	8882.9	8822.4	7939.9
57.5°	1397.6	1388.7	1480.2	1617.5	2364.3	3335.3	6073.0	8909.5	9119.0	9101.3	8183.4
60°	1313.5	1306.1	1368.1	1495.0	2077.9	2864.6	5693.7	9051.2	9356.7	9364.0	8388.5
62.5°	1226.4	1222.0	1275.1	1393.2	1853.6	2520.7	5109.3	8865.2	9504.2	9464.4	8593.7
65°	1127.5	1124.6	1174.7	1270.7	1630.8	2259.5	4536.6	8533.1	9371.4	9417.2	8620.2
67.5°	1009.5	1008.0	1056.7	1123.1	1387.3	1996.8	3660.0	8142.1	8992.1	8941.9	8279.3
70°	864.8	858.9	919.4	981.4	1161.5	1698.7	2848.3	7446.9	8375.2	8556.8	7600.4
72.5°	727.6	724.6	782.2	827.9	962.2	1387.3	2077.9	6440.4	7913.3	7652.1	6847.8
75°	569.7	554.9	615.4	658.2	758.6	1103.9	1416.8	4302.0	6660.3	6605.7	5752.7
77.5°	230.2	267.1	318.8	357.1	423.6	625.7	740.9	2041.0	4248.9	4436.3	4000.9
80°	88.5	94.5	227.3	256.8	284.8	360.1	284.8	860.4	1676.5	1828.5	2317.0
82.5°	50.2	56.1	112.2	107.7	106.3	91.5	106.3	422.1	875.2	959.3	1118.7
85°	28.0	31.0	45.8	50.2	42.8	36.9	32.5	110.7	218.4	206.6	231.7
87.5°	4.4	5.9	7.4	7.4	4.4	4.4	4.4	5.9	5.9	5.9	7.4
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°	2495.6	2495.6	2495.6	2495.6	2495.6	2495.6	2495.6	2495.6	2495.6	2495.6	2495.6
2.5°	2482.3	2466.1	2449.8	2430.7	2407.0	2392.3	2386.4	2393.8	2414.4	2389.3	2368.7
5°	2473.5	2451.3	2414.4	2377.5	2348.0	2322.9	2289.0	2286.0	2291.9	2281.6	2255.0
7.5°	2492.6	2460.2	2384.9	2359.8	2297.8	2238.8	2219.6	2212.2	2194.5	2173.9	2148.8
10°	2531.0	2464.6	2387.9	2314.1	2256.5	2193.1	2119.3	2120.7	2113.4	2089.8	2066.1
12.5°	2550.2	2472.0	2359.8	2281.6	2193.1	2114.8	2042.5	2010.1	2023.3	2004.2	1979.1
15°	2585.6	2503.0	2349.5	2234.4	2113.4	2024.8	1970.2	1923.0	1893.5	1897.9	1883.1
17.5°	2652.0	2531.0	2322.9	2182.7	2051.4	1946.6	1841.8	1837.4	1793.1	1768.0	1745.9
20°	2721.4	2581.2	2320.0	2126.6	1951.0	1821.2	1737.0	1689.8	1663.2	1642.6	1626.3
22.5°	2811.4	2650.6	2330.3	2094.2	1861.0	1714.9	1607.2	1543.7	1500.9	1486.1	1474.3
25°	2938.3	2737.6	2358.3	2036.6	1766.5	1598.3	1452.2	1385.8	1337.1	1325.3	1316.4
27.5°	3112.5	2848.3	2386.4	1974.6	1655.9	1434.5	1279.5	1214.6	1160.0	1158.5	1142.3
30°	3387.0	3018.0	2396.7	1920.0	1537.8	1258.9	1103.9	1043.4	1002.1	985.8	997.6
32.5°	3899.1	3392.9	2461.7	1835.9	1388.7	1087.7	956.3	907.6	861.9	844.2	856.0
35°	4452.5	3841.5	2570.9	1778.4	1224.9	925.3	835.3	777.8	721.7	712.8	708.4
37.5°	4858.4	4250.3	2777.5	1683.9	1070.0	826.5	708.4	661.2	628.7	611.0	627.2
40°	5318.8	4589.8	2933.9	1583.5	912.1	721.7	590.3	575.6	560.8	549.0	566.7
42.5°	5683.4	4939.5	3119.9	1450.7	785.1	612.5	525.4	537.2	544.6	538.7	540.1
45°	6018.4	5199.3	3131.7	1248.5	670.0	531.3	506.2	529.8	547.5	544.6	543.1
47.5°	6346.0	5509.2	3159.7	1034.5	587.4	510.6	507.7	525.4	549.0	553.4	553.4
50°	6684.0	5745.3	3116.9	832.4	556.4	513.6	512.1	510.6	540.1	541.6	546.1
52.5°	6937.8	5937.2	2914.7	687.7	554.9	522.4	519.5	504.7	518.0	528.3	521.0
55°	7206.4	6176.3	2659.4	633.1	552.0	525.4	537.2	512.1	503.3	494.4	503.3
57.5°	7461.7	6343.0	2324.4	600.7	540.1	521.0	544.6	510.6	491.4	466.4	457.5
60°	7658.0	6381.4	1951.0	566.7	525.4	510.6	512.1	500.3	475.2	444.2	430.9
62.5°	7724.4	6403.5	1641.1	534.2	495.9	494.4	482.6	478.2	467.8	448.6	442.7
65°	7668.3	6152.7	1310.5	494.4	470.8	472.3	454.6	439.8	416.2	385.2	382.2
67.5°	7283.1	5711.4	1005.0	444.2	432.4	447.2	428.0	402.9	376.3	355.7	358.6
70°	6623.4	5189.0	705.4	374.9	388.1	414.7	407.3	374.9	345.3	327.6	330.6
72.5°	5890.0	4396.4	479.6	292.2	315.8	371.9	371.9	349.8	320.3	296.6	290.7
75°	4645.9	3453.4	309.9	193.3	208.1	304.0	329.1	295.2	262.7	247.9	242.0
77.5°	3153.8	2249.1	197.8	110.7	138.7	199.2	259.7	264.2	311.4	312.9	299.6
80°	1853.6	1286.9	121.0	64.9	69.4	115.1	208.1	261.2	330.6	233.2	214.0
82.5°	922.4	549.0	54.6	39.8	41.3	57.6	112.2	299.6	255.3	146.1	140.2
85°	205.1	90.0	22.1	20.7	23.6	29.5	57.6	247.9	156.4	118.1	115.1
87.5°	7.4	5.9	5.9	5.9	4.4	4.4	11.8	81.2	62.0	51.7	48.7
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)