

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: P509916

Luminaire Tested: **VERD-M-CA3-170-722-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P509916
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-3)
Test Lab: INNOVATION CENTER
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-M-CA3-170-722-U-T2-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2200K, 1060mA LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18219 lumens
Efficiency: N/A
Efficacy: 105.4 lumens/watt
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

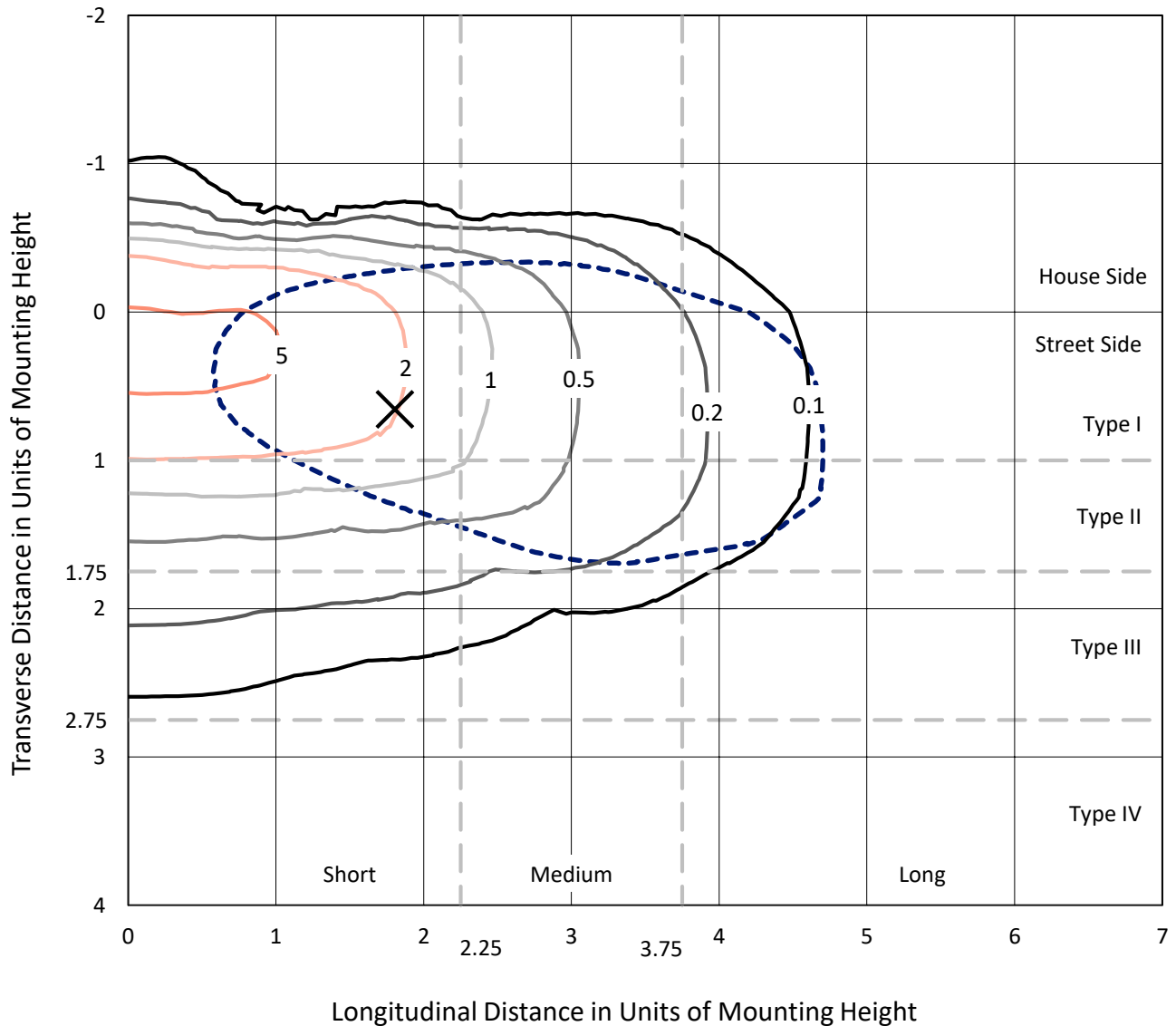
Input Watts (W): 172.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

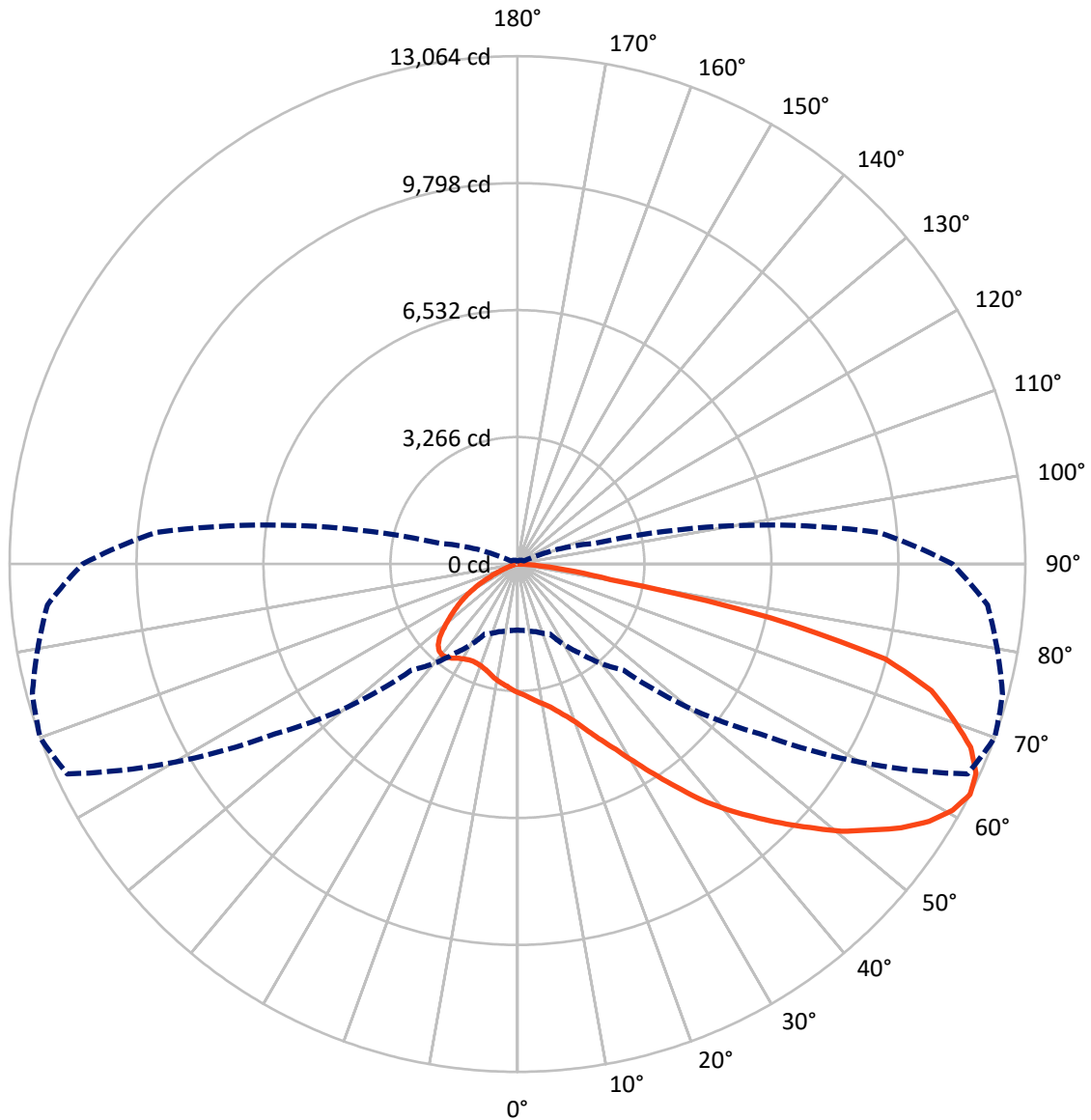
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.3 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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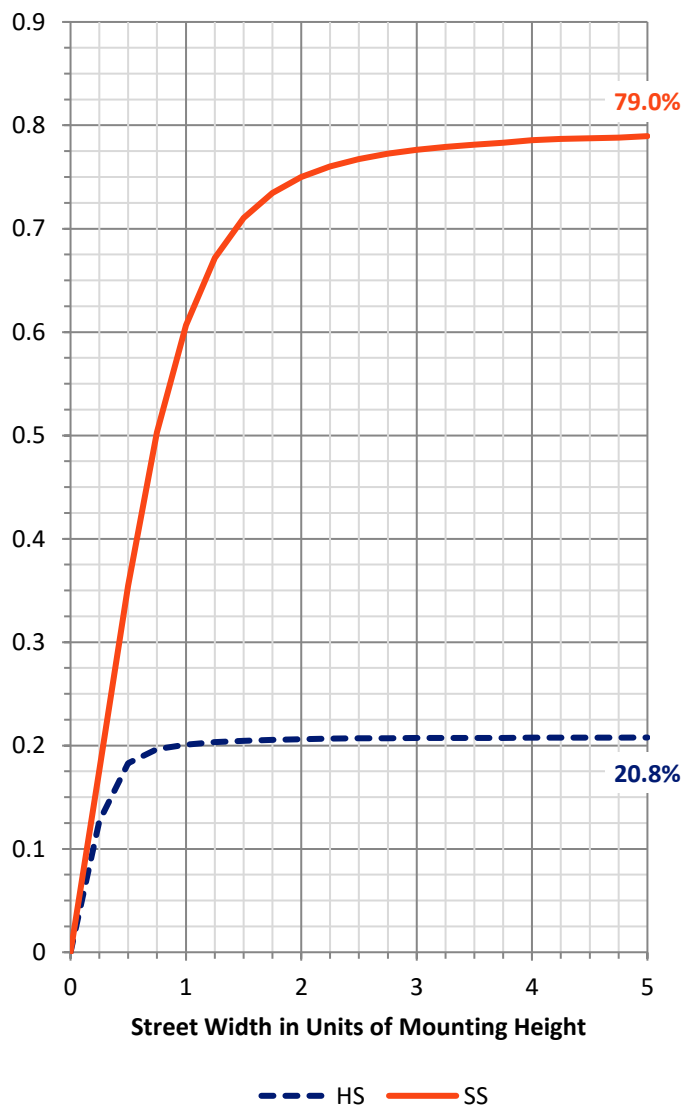
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3831.3	0.0	3831.3
	% Fixture	21.0	0.0	21.0
Street Side	Lumens	14387.7	0.0	14387.7
	% Fixture	79.0	0.0	79.0
Total	Lumens	18219.0	0.0	18219.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	314.5	1.7
10°-20°	938.5	5.2
20°-30°	1591.0	8.7
30°-40°	2339.6	12.8
40°-50°	3115.6	17.1
50°-60°	3644.7	20.0
60°-70°	3665.7	20.1
70°-80°	2320.4	12.7
80°-90°	289.1	1.6
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°	18219.0	100.0
0°-180°	18219.0	100.0



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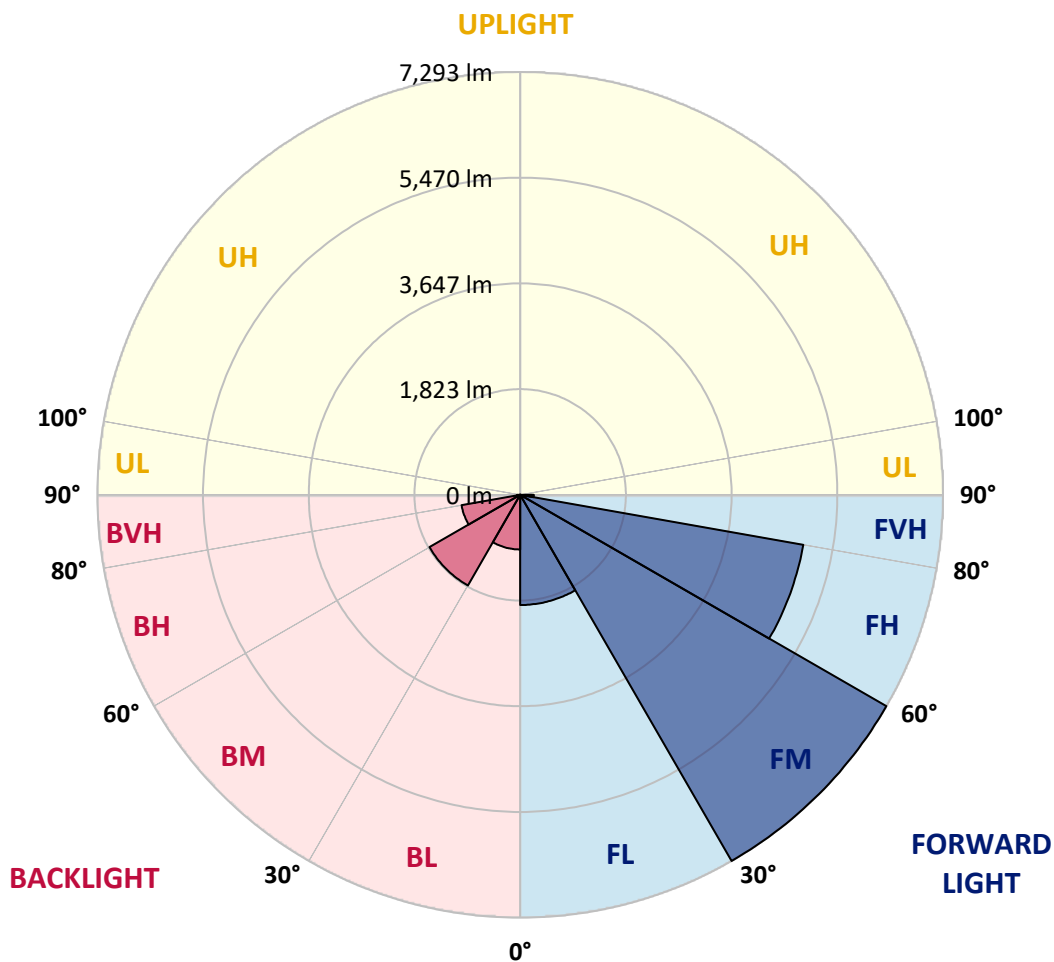
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1900.6	10.4			
FM	(30°-60°)	7293.4	40.0			
FH	(60°-80°)	4959.2	27.2			G2/5000
FVH	(80°-90°)	234.5	1.3			G3/500
BL	(0°-30°)	943.3	5.2	B2/1000		
BM	(30°-60°)	1806.5	9.9	B2/2500		
BH	(60°-80°)	1026.9	5.6	B3/2500		G3/2500
BVH	(80°-90°)	54.7	0.3			G1/100
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	3312.2	3312.2	3312.2	3312.2	3312.2	3312.2	3312.2	3312.2	3312.2	3312.2	3312.2
2.5°	3493.9	3524.5	3501.1	3492.1	3499.3	3463.3	3434.5	3393.2	3373.4	3359.0	3335.6
5°	3671.2	3721.6	3691.0	3672.1	3669.4	3603.7	3565.0	3508.3	3464.2	3425.5	3366.2
7.5°	3858.4	3888.0	3876.3	3854.8	3840.4	3760.3	3691.9	3611.8	3563.2	3511.9	3412.1
10°	4022.1	4058.1	4046.4	4007.7	3994.2	3912.3	3834.1	3725.2	3658.6	3594.7	3457.0
12.5°	4191.3	4231.8	4207.5	4168.8	4157.1	4074.3	3993.3	3861.1	3778.3	3706.3	3515.5
15°	4346.9	4383.8	4366.7	4322.7	4311.0	4240.8	4151.7	4028.4	3938.4	3843.1	3598.3
17.5°	4471.1	4508.0	4486.4	4465.7	4462.1	4392.8	4339.7	4213.8	4128.3	3998.7	3725.2
20°	4562.0	4599.8	4589.0	4598.9	4636.7	4585.4	4553.0	4446.8	4359.5	4219.2	3907.8
22.5°	4634.0	4682.6	4725.8	4745.6	4815.7	4812.1	4804.9	4742.0	4673.6	4527.8	4125.6
25°	4641.2	4697.0	4782.4	4875.1	5002.9	5064.1	5109.1	5099.2	5019.1	4875.1	4427.0
27.5°	4652.0	4709.6	4797.7	4957.0	5185.6	5328.6	5403.3	5449.2	5402.4	5306.1	4769.9
30°	4628.6	4688.0	4798.6	5002.0	5310.6	5576.1	5709.2	5879.3	5884.7	5803.7	5287.2
32.5°	4522.4	4600.7	4734.8	5007.4	5432.1	5834.3	6039.5	6366.1	6437.2	6376.9	5820.8
35°	4345.1	4416.2	4607.9	4959.7	5505.9	6049.4	6424.6	6933.9	7039.2	7035.6	6448.9
37.5°	4149.0	4221.0	4436.9	4847.2	5553.6	6241.0	6763.8	7497.2	7706.8	7662.7	7041.9
40°	3932.1	4007.7	4257.0	4706.0	5530.2	6412.0	7122.8	8043.3	8303.4	8308.8	7608.7
42.5°	3680.2	3742.3	3992.4	4510.7	5452.8	6538.0	7456.7	8618.3	8891.8	8876.6	8143.2
45°	3439.0	3503.8	3722.5	4208.4	5273.7	6608.1	7784.2	9200.5	9500.1	9451.5	8737.1
47.5°	3147.5	3240.2	3489.4	3954.6	4997.5	6602.7	8070.3	9796.1	10132.7	10093.1	9250.0
50°	2422.3	2477.2	3041.3	3692.8	4623.2	6476.8	8350.2	10381.0	10806.6	10729.2	9797.0
52.5°	2182.0	2231.5	2413.3	3378.8	4283.1	6204.1	8583.2	11050.5	11369.0	11308.7	10355.8
55°	2062.3	2089.3	2200.0	2786.7	3951.0	5761.4	8738.9	11645.2	11976.4	11843.2	10878.6
57.5°	1912.1	1945.4	2074.0	2380.0	3542.5	5082.1	8702.9	12181.5	12487.5	12283.2	11339.3
60°	1796.9	1822.1	1942.7	2142.4	3120.5	4378.4	8334.9	12707.9	12861.8	12660.2	11798.2
62.5°	1699.7	1714.1	1798.7	1988.6	2799.3	3864.7	7616.8	12778.1	13064.2	12918.5	12140.1
65°	1579.2	1582.8	1682.6	1831.1	2502.4	3556.0	7000.5	12418.2	12963.5	12914.9	12263.4
67.5°	1437.9	1445.1	1545.9	1659.2	2145.1	3227.6	6040.4	12224.7	12572.0	12541.4	12019.6
70°	1260.6	1275.0	1367.7	1454.1	1816.7	2833.5	4807.6	11459.9	11872.0	11827.0	11216.0
72.5°	1089.7	1081.6	1167.9	1253.4	1513.5	2365.6	3644.2	10143.5	11136.0	11092.8	10172.3
75°	895.3	889.9	979.0	1060.0	1240.8	1911.2	2563.5	7501.7	9784.5	9917.6	8771.3
77.5°	551.6	556.1	607.4	661.4	840.4	1428.0	1635.8	4173.3	6646.8	7882.3	6883.5
80°	399.5	399.5	437.3	469.7	556.1	870.1	814.3	1740.2	2429.5	3804.4	4293.0
82.5°	259.1	248.3	271.7	299.6	309.5	377.0	372.5	872.8	1238.1	1490.1	1787.9
85°	135.0	149.4	90.0	126.9	134.1	125.1	128.7	409.4	549.8	704.5	775.6
87.5°	20.7	16.2	21.6	29.7	34.2	28.8	25.2	47.7	73.8	98.1	116.1
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°	3312.2	3312.2	3312.2	3312.2	3312.2	3312.2	3312.2	3312.2	3312.2	3312.2	3312.2
2.5°	3320.3	3315.8	3274.4	3214.1	3164.6	3123.2	3096.2	3078.2	3098.0	3062.0	3057.5
5°	3329.3	3298.7	3208.7	3122.3	3055.7	2966.6	2906.4	2865.9	2882.1	2850.6	2838.0
7.5°	3353.6	3297.8	3173.6	3035.9	2910.0	2814.6	2721.9	2632.8	2619.3	2599.5	2600.4
10°	3375.2	3295.1	3133.1	2953.2	2806.5	2638.2	2526.6	2434.9	2414.2	2390.8	2379.1
12.5°	3409.4	3301.4	3082.7	2865.0	2668.8	2474.5	2353.9	2245.9	2225.2	2179.3	2169.4
15°	3477.7	3323.9	3033.2	2756.1	2514.0	2317.9	2162.2	2067.7	2030.0	1978.7	1977.8
17.5°	3566.8	3389.6	3008.0	2653.5	2382.7	2163.1	1998.5	1903.1	1839.2	1808.6	1800.5
20°	3693.7	3475.0	3007.1	2560.8	2245.9	1997.6	1808.6	1700.6	1646.6	1621.4	1606.1
22.5°	3888.9	3601.0	3023.3	2496.1	2108.2	1837.4	1649.3	1500.9	1411.8	1342.5	1352.4
25°	4131.9	3790.0	3060.2	2436.7	1988.6	1684.4	1448.7	1242.6	1083.4	1014.1	1019.5
27.5°	4440.5	4015.8	3155.6	2376.4	1852.7	1519.8	1186.8	925.0	804.4	723.4	729.7
30°	4835.5	4296.6	3280.7	2329.6	1726.7	1289.4	893.5	682.1	575.9	509.3	503.0
32.5°	5307.9	4703.3	3417.4	2298.1	1589.1	1001.5	644.3	500.3	396.8	359.0	364.4
35°	5892.8	5160.4	3626.2	2252.2	1353.3	712.6	459.8	338.3	285.2	278.0	278.9
37.5°	6426.4	5628.3	3833.2	2174.8	1068.1	506.6	312.2	257.3	245.6	242.9	246.5
40°	6949.2	6054.8	4020.3	2062.3	734.2	347.3	229.4	232.1	222.3	215.1	211.5
42.5°	7438.7	6466.0	4167.0	1855.4	502.1	229.4	203.4	211.5	209.7	195.3	189.0
45°	7966.9	6900.6	4248.0	1565.7	315.8	195.3	182.7	197.1	206.1	189.9	182.7
47.5°	8417.7	7324.4	4244.4	1199.4	214.2	184.5	171.9	184.5	195.3	183.6	177.3
50°	8937.7	7675.3	4129.2	761.2	189.9	171.0	164.7	169.2	183.6	175.5	169.2
52.5°	9515.4	8155.8	3954.6	424.7	180.0	162.0	153.0	158.4	171.0	161.1	164.7
55°	9994.1	8554.4	3544.3	289.7	175.5	151.2	145.8	149.4	154.8	144.9	150.3
57.5°	10421.5	8883.7	3129.5	237.5	169.2	144.0	143.1	135.9	135.0	128.7	123.3
60°	10854.3	9143.8	2569.8	215.1	162.9	144.9	129.6	119.7	111.6	105.3	102.6
62.5°	11186.3	9323.8	2032.7	194.4	153.9	135.9	118.8	102.6	89.1	81.0	81.0
65°	11283.5	9243.7	1430.7	176.4	144.0	127.8	106.2	83.7	67.5	62.1	59.4
67.5°	10972.2	8783.9	996.1	162.9	134.1	118.8	93.6	68.4	54.0	46.8	45.0
70°	10179.5	8014.5	587.6	144.0	121.5	103.5	85.5	55.8	44.1	36.9	35.1
72.5°	9007.9	6861.0	366.2	122.4	104.4	84.6	63.9	45.9	35.1	28.8	27.9
75°	7440.5	5348.4	239.3	94.5	82.8	66.6	48.6	36.9	30.6	24.3	22.5
77.5°	5966.6	3783.7	214.2	72.0	61.2	47.7	36.9	30.6	25.2	21.6	21.6
80°	3433.6	2159.5	175.5	49.5	37.8	36.0	28.8	25.2	23.4	20.7	19.8
82.5°	1687.1	1037.5	113.4	30.6	21.6	23.4	24.3	22.5	19.8	18.0	18.0
85°	581.3	345.5	45.9	19.8	14.4	14.4	15.3	16.2	15.3	14.4	14.4
87.5°	90.0	65.7	12.6	11.7	9.0	8.1	9.0	9.9	9.9	9.0	9.0
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)