

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: P509871

Luminaire Tested: **VERD-M-CA3-160-722-U-T3**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P509871
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-4)
Test Lab: INNOVATION CENTER
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-M-CA3-160-722-U-T3
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2200K, 1000mA LEDS AND TYPE III OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19046 lumens
Efficiency: N/A
Efficacy: 117.1 lumens/watt
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G3

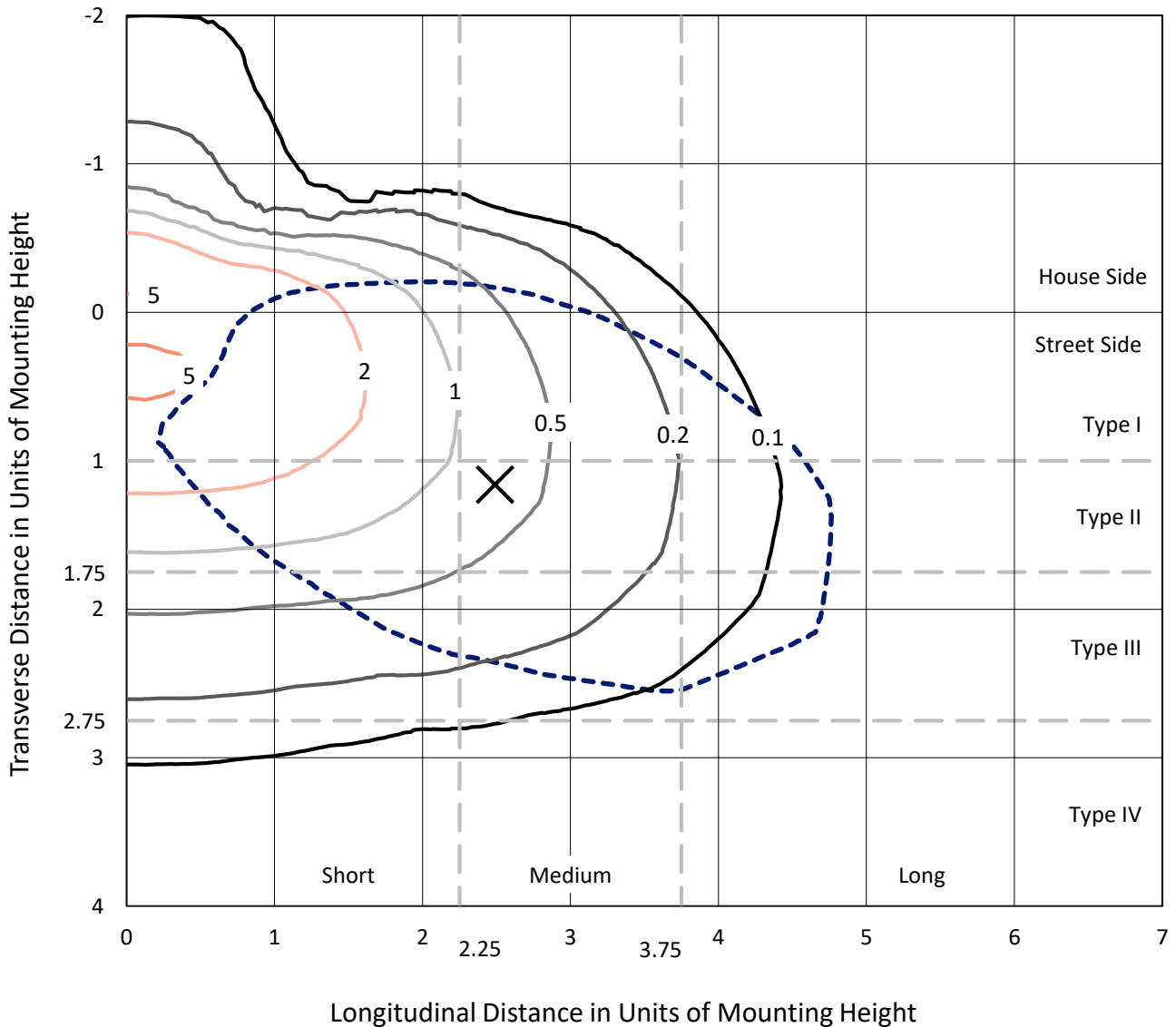
Input Watts (W): 162.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

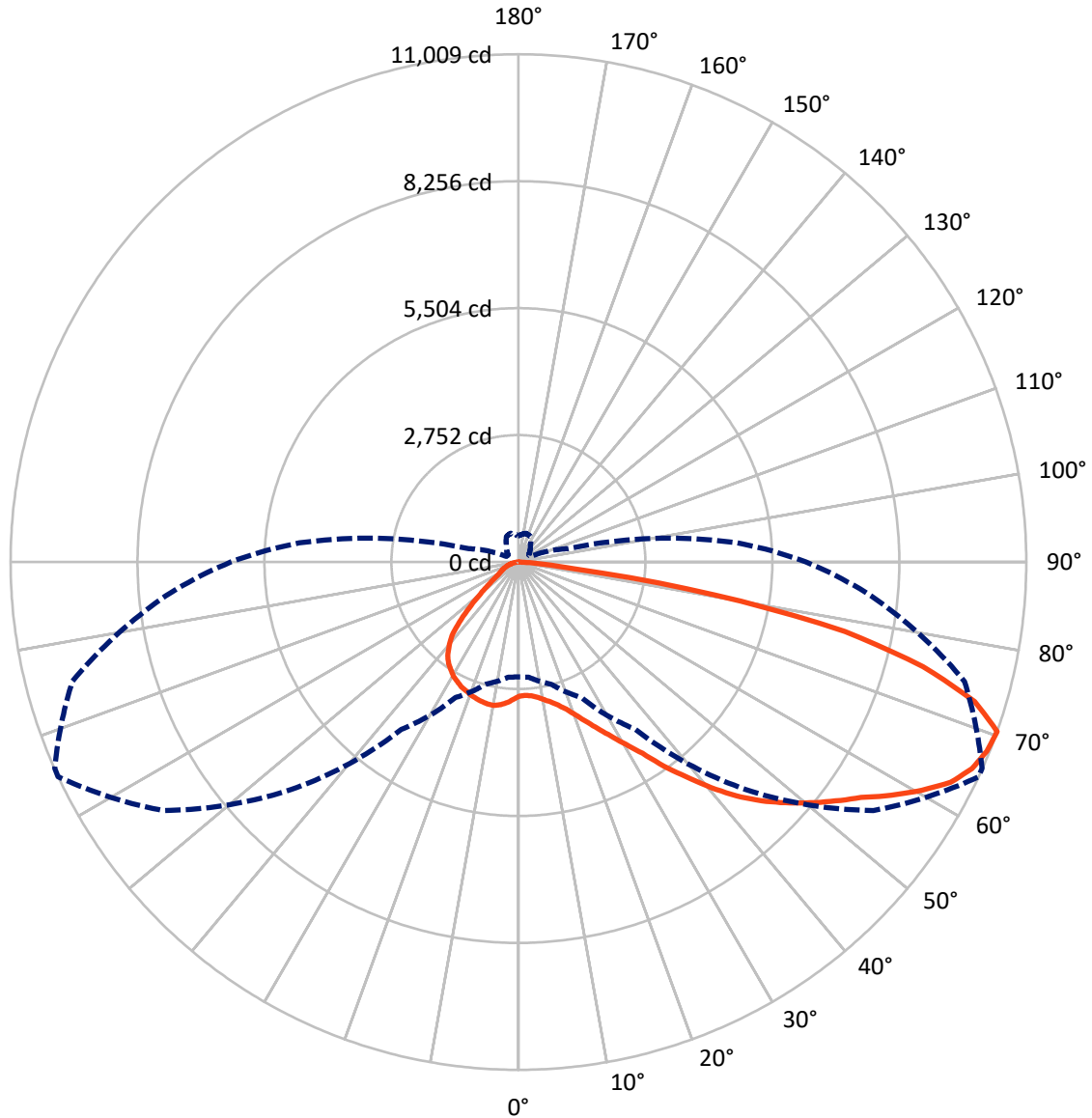
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.3 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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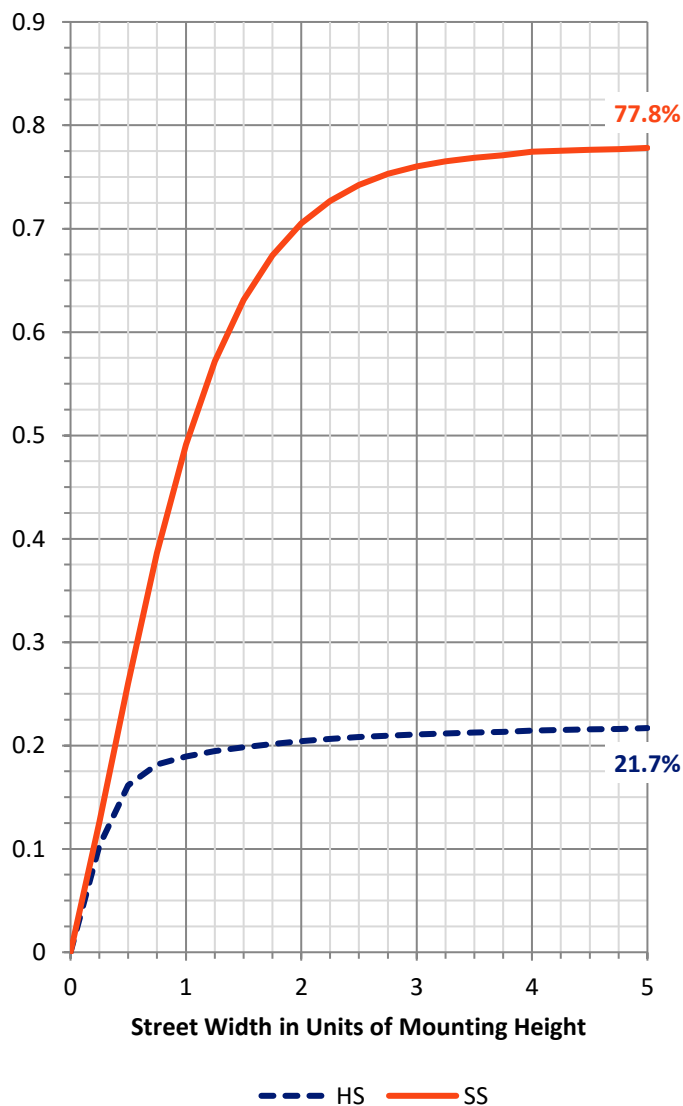
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4201.4	0.0	4201.4
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	14844.6	0.0	14844.6
	% Fixture	77.9	0.0	77.9
Total	Lumens	19046.0	0.0	19046.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	291.7	1.5
10°-20°	921.9	4.8
20°-30°	1599.4	8.4
30°-40°	2325.4	12.2
40°-50°	3106.8	16.3
50°-60°	3784.4	19.9
60°-70°	4079.7	21.4
70°-80°	2645.0	13.9
80°-90°	291.7	1.5
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°	19046.0	100.0
0°-180°	19046.0	100.0

Coefficient of Utilization



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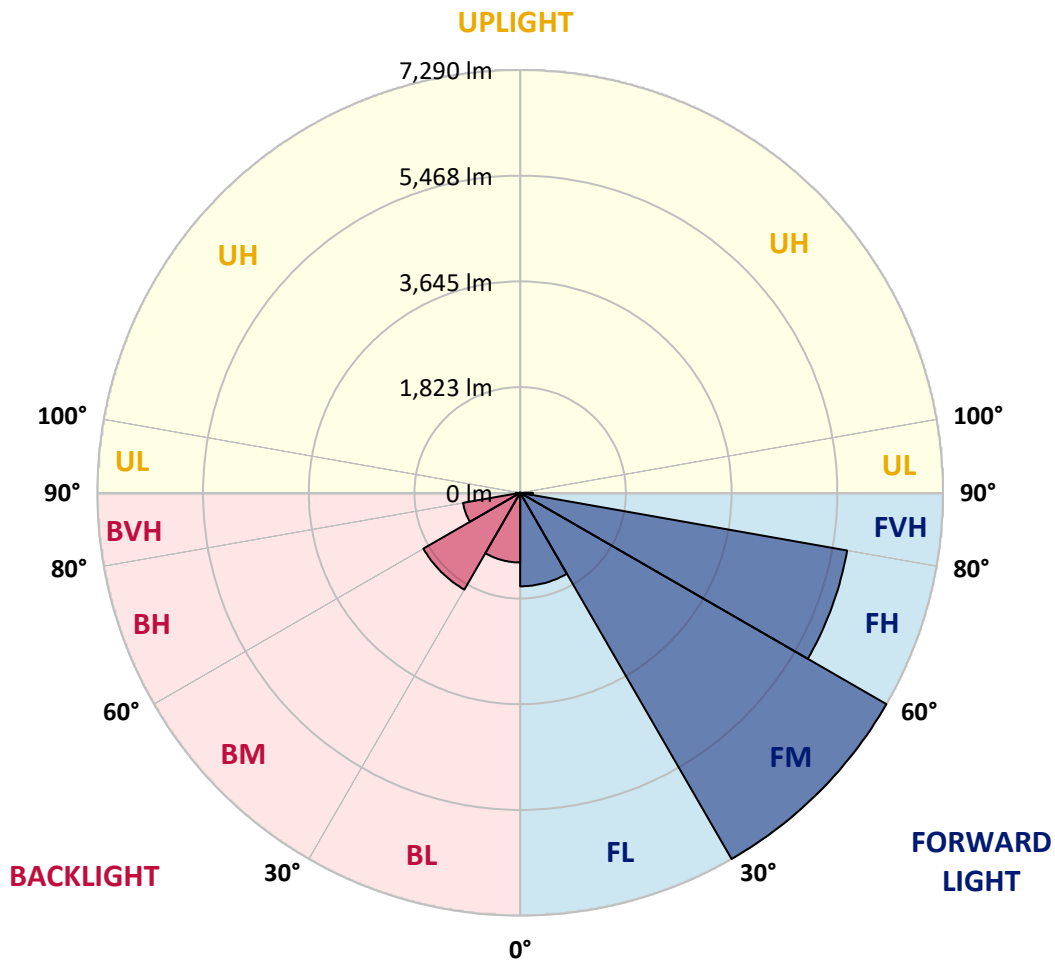
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1611.8	8.5			
FM (30°-60°)	7290.5	38.3			
FH (60°-80°)	5724.8	30.1			G3/7500
FVH (80°-90°)	217.6	1.1			G2/225
BL (0°-30°)	1201.2	6.3	B3/2500		
BM (30°-60°)	1926.2	10.1	B2/2500		
BH (60°-80°)	999.9	5.2	B2/1000		G2/1000
BVH (80°-90°)	74.1	0.4			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G3

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	2907.8	2907.8	2907.8	2907.8	2907.8	2907.8	2907.8	2907.8	2907.8	2907.8	2907.8
2.5°	2864.8	2890.6	2876.9	2877.7	2897.5	2881.2	2892.3	2892.3	2891.5	2897.5	2915.5
5°	2935.3	2962.7	2946.4	2936.1	2940.4	2919.8	2915.5	2912.1	2909.5	2916.4	2946.4
7.5°	3038.3	3070.1	3052.1	3042.6	3037.5	2990.2	2981.6	2958.4	2955.9	2961.9	2989.4
10°	3174.9	3217.8	3196.3	3169.7	3151.7	3096.7	3052.9	3032.3	3026.3	3022.9	3051.2
12.5°	3371.5	3409.3	3384.4	3334.6	3310.5	3222.1	3169.7	3111.3	3110.4	3098.4	3119.9
15°	3557.9	3597.4	3565.6	3516.6	3484.9	3365.5	3288.2	3216.1	3207.5	3193.7	3200.6
17.5°	3738.2	3786.3	3764.0	3719.3	3680.7	3547.6	3446.2	3353.5	3344.0	3322.6	3290.8
20°	3962.3	4006.1	4000.1	3959.8	3916.8	3765.7	3654.9	3535.5	3525.2	3486.6	3415.3
22.5°	4186.5	4240.6	4207.1	4200.2	4176.2	4025.9	3871.3	3750.2	3739.9	3689.3	3558.7
25°	4397.7	4445.8	4457.9	4446.7	4449.3	4300.7	4147.0	3995.0	3984.7	3916.0	3727.0
27.5°	4647.6	4693.2	4696.6	4699.2	4729.2	4605.6	4425.2	4268.9	4262.1	4184.8	3945.2
30°	4839.1	4914.7	4930.2	4944.8	4960.2	4894.1	4730.1	4584.1	4570.4	4486.2	4190.8
32.5°	5014.3	5071.0	5126.0	5156.0	5225.6	5166.3	5031.5	4941.3	4942.2	4902.7	4582.4
35°	5150.0	5212.7	5282.3	5392.2	5493.5	5468.6	5426.5	5431.7	5432.6	5449.7	5110.5
37.5°	5279.7	5336.4	5424.0	5555.4	5734.0	5766.6	5795.0	5902.3	5940.1	6020.8	5598.3
40°	5357.8	5418.0	5531.3	5713.4	5945.2	6062.9	6148.8	6424.4	6489.7	6490.6	5975.3
42.5°	5243.6	5309.7	5512.4	5836.2	6135.9	6355.7	6581.6	6929.4	6976.6	6871.0	6297.3
45°	5141.4	5202.4	5420.5	5855.1	6285.3	6668.3	6982.6	7385.4	7419.7	7206.8	6594.5
47.5°	5042.7	5090.8	5343.2	5815.6	6438.2	6981.8	7324.4	7797.6	7822.5	7574.3	6884.7
50°	4906.1	4963.7	5231.6	5769.2	6530.1	7250.6	7659.3	8204.6	8201.2	7904.9	7147.5
52.5°	4756.7	4813.4	5101.1	5684.2	6590.2	7459.2	8040.6	8603.1	8605.7	8284.5	7407.7
55°	4568.6	4638.2	4941.3	5569.1	6604.8	7623.3	8371.2	9011.9	9054.0	8671.8	7658.5
57.5°	4343.6	4413.2	4744.7	5400.8	6518.0	7760.7	8724.2	9534.0	9556.3	9067.7	7845.7
60°	4081.7	4165.9	4482.8	5175.8	6352.3	7920.4	9151.9	10045.8	10053.6	9421.5	8002.0
62.5°	3778.6	3838.7	4171.9	4849.4	6087.8	7983.9	9505.7	10515.6	10517.3	9688.6	8072.4
65°	3450.5	3473.7	3752.8	4405.5	5702.2	7880.0	9641.4	10801.6	10793.8	9923.0	8037.2
67.5°	3059.8	3048.6	3346.6	3856.7	5214.4	7534.0	9575.2	10948.4	10971.6	10103.4	7923.8
70°	2487.8	2504.2	2741.2	3242.7	4426.9	6978.3	9393.2	11008.5	11002.5	10013.2	7558.9
72.5°	1888.4	1917.6	2089.4	2465.5	3435.9	5868.8	8613.4	10343.8	10355.9	9377.7	6901.9
75°	1167.9	1252.1	1397.2	1626.5	2152.9	4204.5	7331.3	9060.8	9121.8	8274.2	5683.3
77.5°	511.8	531.6	604.6	784.1	1125.8	2110.8	5419.7	7236.0	7416.3	6691.5	4099.7
80°	316.9	316.9	337.5	393.3	502.4	784.9	2171.8	4320.4	4137.5	3827.5	1808.6
82.5°	263.6	263.6	273.9	283.4	257.6	332.3	726.5	1210.9	1297.6	1050.3	555.6
85°	143.4	146.8	147.7	150.3	147.7	179.5	286.0	358.1	362.4	328.0	197.5
87.5°	52.4	55.8	54.1	50.7	45.5	42.9	55.0	55.8	57.5	53.2	29.2
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°	2907.8	2907.8	2907.8	2907.8	2907.8	2907.8	2907.8	2907.8	2907.8	2907.8	2907.8
2.5°	2927.5	2939.6	2971.3	2973.9	2985.9	2990.2	3000.5	3015.1	3040.9	3028.0	3013.4
5°	2961.0	2976.5	3027.1	3052.9	3086.4	3106.2	3138.8	3155.1	3194.6	3181.7	3180.0
7.5°	3011.7	3044.3	3089.8	3114.7	3158.5	3171.4	3195.5	3195.5	3228.1	3211.8	3207.5
10°	3080.4	3101.9	3150.0	3151.7	3176.6	3176.6	3204.9	3186.9	3218.7	3199.8	3198.9
12.5°	3135.4	3147.4	3165.4	3150.8	3163.7	3149.1	3163.7	3142.2	3162.0	3137.9	3132.8
15°	3197.2	3180.9	3162.8	3128.5	3117.3	3094.1	3082.1	3059.8	3061.5	3034.0	3029.7
17.5°	3266.7	3224.7	3172.3	3097.6	3056.3	2997.1	2972.2	2940.4	2922.4	2897.5	2908.6
20°	3350.9	3288.2	3179.2	3063.2	2975.6	2885.5	2827.1	2775.5	2771.2	2748.9	2736.9
22.5°	3460.0	3359.5	3209.2	3014.3	2873.4	2744.6	2657.9	2572.0	2563.4	2517.9	2500.7
25°	3594.8	3454.0	3224.7	2976.5	2754.1	2577.2	2440.6	2321.2	2263.7	2215.6	2204.5
27.5°	3776.0	3593.1	3255.6	2908.6	2613.2	2369.3	2173.5	2015.5	1946.8	1922.8	1897.9
30°	3988.1	3763.1	3313.1	2852.0	2446.6	2104.0	1865.2	1677.2	1602.5	1564.7	1552.6
32.5°	4300.7	3977.8	3366.4	2758.4	2244.8	1812.0	1501.1	1293.3	1247.8	1240.9	1257.2
35°	4755.8	4381.4	3443.7	2671.6	2007.8	1487.4	1143.9	1008.2	998.7	1000.5	1000.5
37.5°	5229.9	4766.1	3672.9	2543.7	1717.5	1119.8	870.8	796.9	800.4	800.4	799.5
40°	5539.0	5075.3	3839.5	2362.5	1356.8	802.9	645.8	590.0	614.0	646.7	663.8
42.5°	5880.0	5356.1	3954.6	2153.8	943.8	567.6	469.7	489.5	559.9	609.7	616.6
45°	6170.2	5594.9	3967.5	1829.2	608.0	431.1	428.5	485.2	566.8	620.9	625.2
47.5°	6419.3	5812.1	3886.8	1458.2	443.1	402.8	428.5	499.8	573.7	607.1	610.6
50°	6660.6	5984.7	3697.0	1120.7	403.6	392.5	433.7	502.4	548.8	571.9	568.5
52.5°	6875.3	6141.9	3422.2	874.2	388.2	385.6	438.0	499.8	529.0	527.3	524.7
55°	7038.4	6188.3	3207.5	681.9	375.3	381.3	440.5	502.4	523.8	508.4	505.0
57.5°	7122.6	6130.7	3027.1	541.9	361.5	377.0	447.4	501.5	539.3	568.5	566.8
60°	7120.9	6065.5	2804.7	467.2	347.8	373.6	458.6	544.5	681.0	708.5	709.3
62.5°	7093.4	5953.8	2499.9	422.5	332.3	375.3	466.3	618.3	775.5	753.1	735.1
65°	7002.4	5744.3	2091.1	374.4	312.6	377.0	462.9	669.0	711.1	631.2	620.0
67.5°	6749.0	5338.9	1642.0	334.9	294.6	367.6	468.9	621.7	653.5	602.9	586.5
70°	6234.6	4767.9	1113.0	288.5	273.9	353.8	455.1	611.4	644.9	593.4	569.4
72.5°	5419.7	3826.7	650.9	248.2	243.9	325.5	448.3	618.3	655.2	597.7	566.8
75°	4218.3	2682.8	376.1	201.0	203.5	300.6	411.3	583.1	649.2	604.6	564.2
77.5°	2723.1	1302.7	265.4	160.6	158.9	237.0	334.1	510.1	625.2	610.6	577.1
80°	974.7	475.8	186.4	119.4	115.9	160.6	256.8	410.5	529.0	547.9	547.9
82.5°	350.4	238.7	119.4	73.0	72.1	102.2	191.5	311.7	383.9	432.8	444.8
85°	146.8	103.9	58.4	36.9	30.1	39.5	98.8	193.2	260.2	280.0	304.9
87.5°	21.5	18.9	15.5	12.0	10.3	10.3	12.9	55.8	92.7	133.1	164.9
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)