

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: P510217

Luminaire Tested: **VERD-M-CA4-230-727-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510217
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-6)
Test Lab: INNOVATION CENTER
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-M-CA4-230-727-U-T4
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 2700K, 1050mA LEDS AND TYPE IV OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27399 lumens
Efficiency: N/A
Efficacy: 117.4 lumens/watt
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

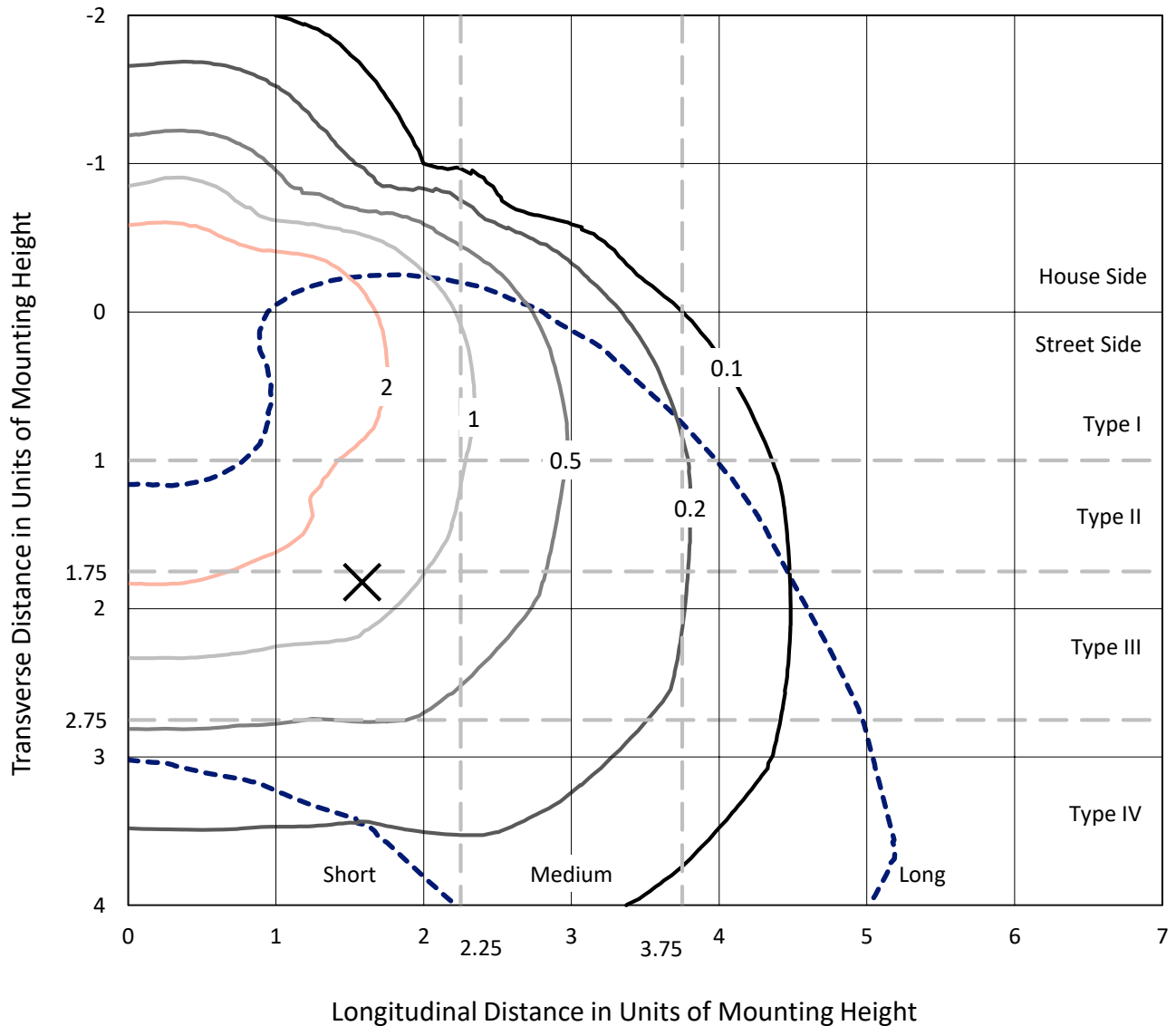
Input Watts (W): 233.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

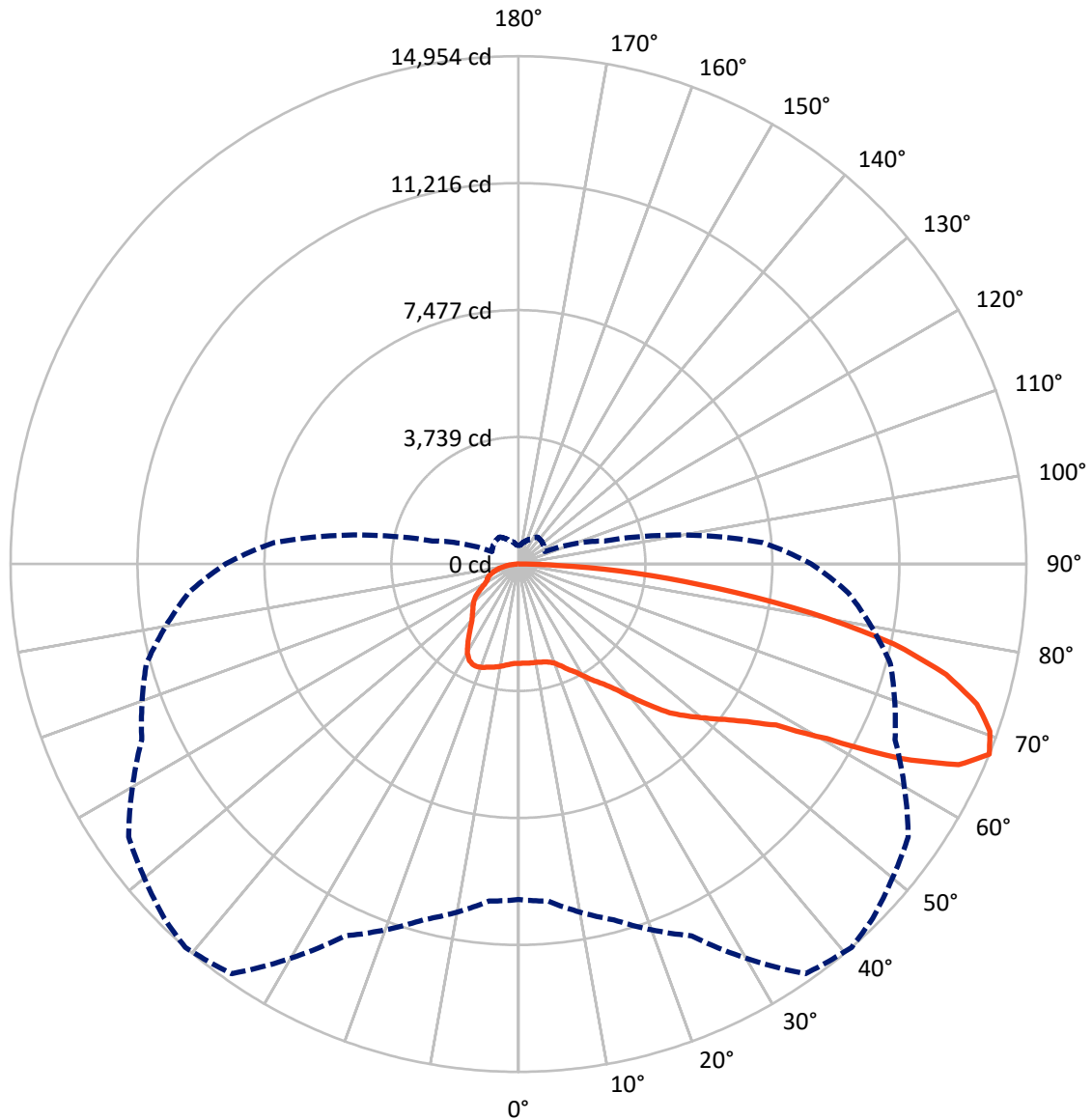
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.9 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 41-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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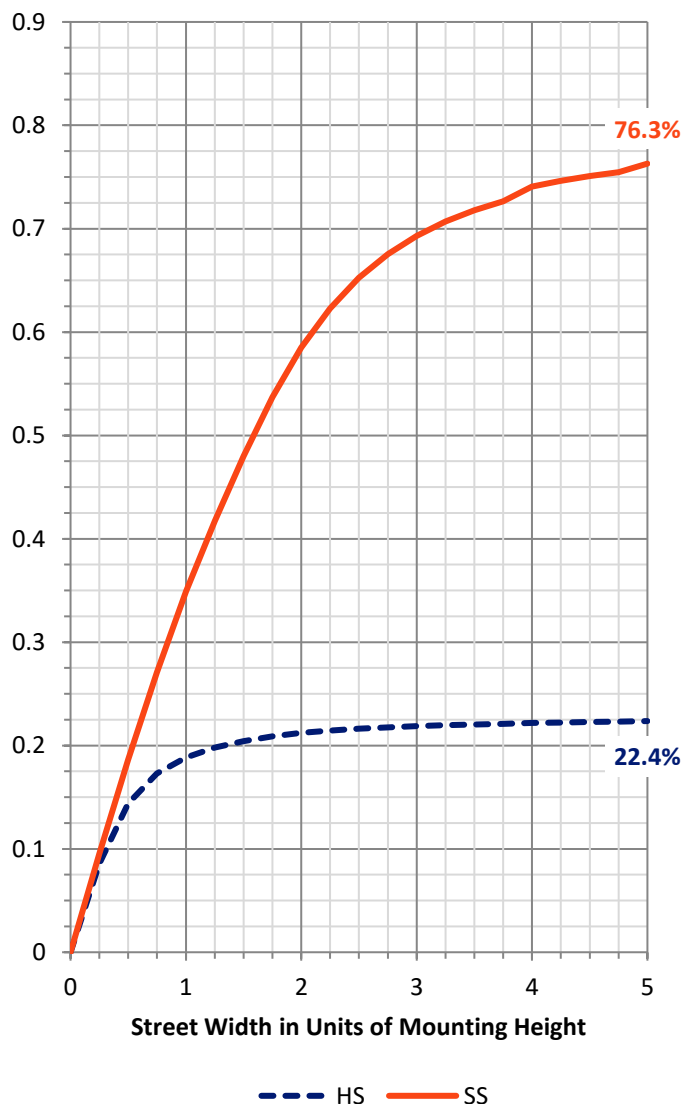
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6200.3	0.0	6200.3
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	21198.7	0.0	21198.7
	% Fixture	77.4	0.0	77.4
Total	Lumens	27399.0	0.0	27399.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	282.7	1.0
10°-20°	876.7	3.2
20°-30°	1567.8	5.7
30°-40°	2458.3	9.0
40°-50°	3812.1	13.9
50°-60°	5374.1	19.6
60°-70°	6850.7	25.0
70°-80°	5126.6	18.7
80°-90°	1050.0	3.8
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°	27399.0	100.0
0°-180°	27399.0	100.0

Coefficient of Utilization



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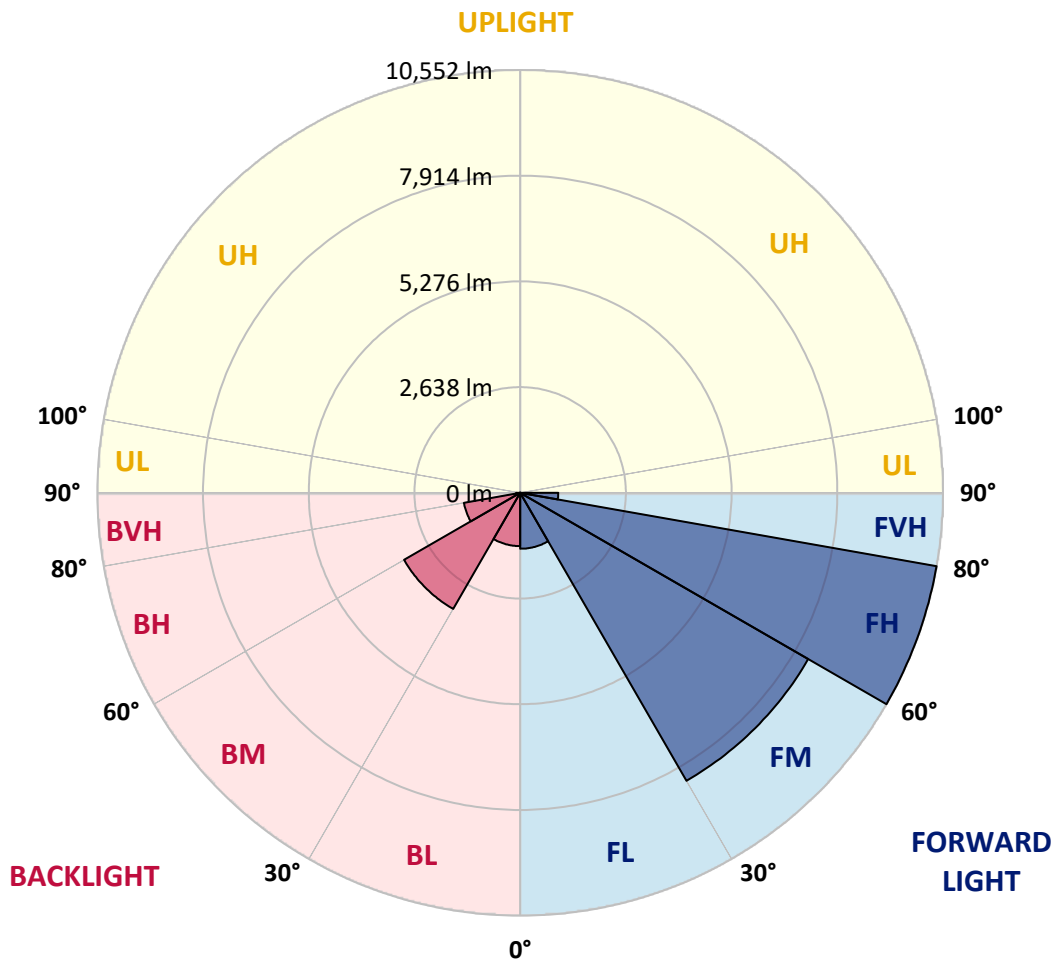
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1396.0	5.1			
FM	(30°-60°)	8298.9	30.3			
FH	(60°-80°)	10551.9	38.5			G4/12000
FVH	(80°-90°)	951.9	3.5			G5
BL	(0°-30°)	1331.2	4.9	B3/2500		
BM	(30°-60°)	3345.6	12.2	B3/5000		
BH	(60°-80°)	1425.4	5.2	B3/2500		G3/2500
BVH	(80°-90°)	98.1	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-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	2925.3	2925.3	2925.3	2925.3	2925.3	2925.3	2925.3	2925.3	2925.3	2925.3	2925.3
2.5°	2889.4	2922.8	2917.9	2911.7	2921.6	2922.8	2894.3	2905.5	2911.7	2921.6	2937.7
5°	2896.8	2930.3	2927.8	2916.6	2924.1	2927.8	2901.8	2921.6	2921.6	2925.3	2943.9
7.5°	2880.7	2912.9	2912.9	2909.2	2925.3	2940.2	2916.6	2934.0	2943.9	2953.8	2966.2
10°	2865.8	2893.1	2903.0	2900.5	2937.7	2941.4	2925.3	2967.5	2983.6	2993.5	3008.4
12.5°	2849.7	2883.2	2896.8	2910.4	2950.1	2963.8	2955.1	2998.5	3032.0	3049.3	3065.4
15°	2842.2	2879.4	2901.8	2921.6	2965.0	2989.8	2989.8	3055.5	3095.2	3117.5	3146.0
17.5°	2894.3	2932.8	2950.1	2966.2	3005.9	3039.4	3036.9	3113.8	3172.1	3206.8	3258.9
20°	3023.3	3069.2	3079.1	3085.3	3110.1	3122.5	3118.8	3201.9	3282.5	3348.2	3406.5
22.5°	3247.7	3275.0	3280.0	3255.2	3261.4	3271.3	3265.1	3311.0	3402.7	3479.6	3583.8
25°	3431.3	3474.7	3462.3	3426.3	3431.3	3444.9	3426.3	3497.0	3562.7	3663.2	3768.6
27.5°	3624.7	3657.0	3643.3	3621.0	3616.0	3606.1	3602.4	3692.9	3789.6	3869.0	4025.3
30°	3860.3	3877.7	3838.0	3828.1	3836.8	3843.0	3819.4	3934.7	4022.8	4136.9	4347.7
32.5°	4257.1	4273.3	4216.2	4063.7	4067.4	4095.9	4076.1	4221.2	4387.4	4526.2	4740.8
35°	4763.1	4763.1	4718.5	4503.9	4341.5	4342.7	4347.7	4552.3	4861.1	5172.3	5393.0
37.5°	5275.2	5292.6	5208.3	5012.3	4806.5	4697.4	4605.6	4868.5	5272.8	5967.2	6295.8
40°	5808.5	5835.8	5709.3	5529.5	5292.6	5168.6	5061.9	5221.9	5767.5	6754.6	7015.1
42.5°	6274.7	6313.2	6183.0	5993.2	5828.3	5688.2	5527.0	5591.5	6311.9	7502.4	7650.0
45°	6708.8	6729.8	6619.5	6463.2	6326.8	6249.9	6137.1	6211.5	6934.4	8234.0	8206.8
47.5°	7028.7	7059.7	6959.3	6874.9	6734.8	6688.9	6687.7	6892.3	7635.1	8816.9	8690.4
50°	7548.3	7524.7	7299.0	7196.1	7110.5	7125.4	7161.4	7514.8	8458.5	9378.6	9097.1
52.5°	8420.0	8376.6	7875.7	7661.1	7555.7	7604.1	7622.7	8079.0	9289.3	9863.5	9433.2
55°	9547.3	9408.4	9043.8	8468.4	8137.3	8183.2	8162.1	8685.4	9954.0	10326.0	9682.4
57.5°	10292.5	10422.8	10247.9	9919.3	9097.1	8947.1	8897.5	9285.6	10569.1	10768.7	9940.4
60°	10939.9	11155.6	11433.4	11222.6	11000.6	10438.9	9976.3	9967.7	11111.0	11063.9	10044.5
62.5°	11623.1	11737.2	12165.0	12295.3	12707.0	12604.0	11984.0	10830.7	11652.9	11279.6	10105.3
65°	10932.4	11084.9	11863.7	12574.3	14098.3	14247.1	14045.0	12435.4	12028.6	11390.0	10018.5
67.5°	9880.8	9965.2	10846.9	12079.5	14728.3	14954.0	14750.6	14010.3	12237.0	11341.6	9750.6
70°	8532.9	8632.1	9474.1	11155.6	14696.0	14725.8	14646.4	14155.4	12153.9	11114.7	9076.0
72.5°	6918.3	7043.6	7783.9	9529.9	13991.7	14120.6	13995.4	13867.7	11920.8	10479.8	7914.1
75°	5234.3	5400.5	6061.4	7597.9	12364.7	13014.5	13030.6	13425.0	11015.5	8984.3	5744.0
77.5°	3570.1	3728.9	4355.1	5788.6	10264.0	11302.0	11572.3	12003.8	9203.8	6639.3	3133.6
80°	2010.1	1995.3	2790.1	4135.6	7828.5	8740.0	9079.8	9062.4	6463.2	3408.9	638.6
82.5°	928.8	931.3	1427.3	2640.1	5300.0	5901.5	6039.1	5256.6	2268.1	577.9	203.4
85°	462.5	467.5	687.0	1324.4	2992.3	3457.3	3286.2	2187.5	486.1	168.6	121.5
87.5°	183.5	176.1	271.6	544.4	1080.1	1144.6	999.5	437.7	88.0	59.5	40.9
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°	2925.3	2925.3	2925.3	2925.3	2925.3	2925.3	2925.3	2925.3	2925.3	2925.3	2925.3
2.5°	2934.0	2936.5	2947.6	2925.3	2931.5	2926.6	2922.8	2942.7	2941.4	2945.2	2939.0
5°	2942.7	2948.9	2960.0	2950.1	2960.0	2955.1	2958.8	2986.1	2989.8	2988.6	2988.6
7.5°	2966.2	2972.4	2993.5	2981.1	3003.4	2997.2	2998.5	3024.5	3029.5	3022.0	3019.6
10°	3015.8	3020.8	3050.6	3048.1	3056.8	3051.8	3046.8	3058.0	3055.5	3044.4	3039.4
12.5°	3072.9	3086.5	3120.0	3121.2	3132.4	3107.6	3081.6	3077.8	3070.4	3053.0	3049.3
15°	3158.4	3174.6	3225.4	3213.0	3205.6	3152.2	3108.8	3074.1	3044.4	3029.5	3015.8
17.5°	3281.2	3308.5	3379.2	3340.7	3286.2	3208.1	3132.4	3056.8	2993.5	2940.2	2919.1
20°	3437.5	3468.5	3528.0	3477.1	3394.1	3277.5	3154.7	3018.3	2880.7	2762.9	2745.5
22.5°	3623.5	3673.1	3716.5	3599.9	3477.1	3329.6	3154.7	2958.8	2730.6	2554.5	2511.1
25°	3840.5	3878.9	3865.3	3701.6	3524.3	3338.3	3120.0	2853.4	2531.0	2326.4	2291.6
27.5°	4076.1	4093.5	3988.1	3750.0	3529.2	3287.4	3022.0	2666.1	2297.8	2136.6	2103.2
30°	4366.3	4314.2	4113.3	3779.7	3479.6	3174.6	2847.2	2392.1	2108.1	1966.7	1928.3
32.5°	4678.8	4583.3	4202.6	3758.6	3370.5	2986.1	2576.9	2198.6	1981.6	1809.3	1777.0
35°	5274.0	5002.4	4332.8	3695.4	3180.8	2734.3	2315.2	2049.8	1847.7	1662.9	1633.2
37.5°	6077.6	5605.1	4515.1	3607.4	2956.3	2490.1	2120.5	1891.1	1716.3	1525.3	1478.2
40°	6702.6	6214.0	4807.7	3513.1	2749.2	2258.2	1979.1	1808.0	1629.4	1426.1	1385.2
42.5°	7297.8	6770.8	5167.4	3407.7	2535.9	2097.0	1917.1	1789.4	1605.9	1398.8	1360.4
45°	7823.6	7220.9	5477.4	3302.3	2295.4	1948.1	1871.3	1753.5	1572.4	1364.1	1326.9
47.5°	8248.9	7607.8	5746.5	3188.2	2077.1	1835.3	1811.7	1687.7	1507.9	1293.4	1248.7
50°	8633.3	7935.2	5932.5	3066.7	1863.8	1743.5	1713.8	1567.4	1380.2	1190.5	1161.9
52.5°	8870.2	8157.2	6044.1	3086.5	1661.7	1640.6	1592.2	1442.2	1268.6	1106.1	1068.9
55°	9118.2	8366.7	6042.8	2974.9	1493.0	1485.6	1439.7	1324.4	1188.0	1051.6	1029.3
57.5°	9219.9	8385.3	5930.0	2450.4	1344.2	1297.1	1287.2	1226.4	1107.4	978.4	953.6
60°	9288.1	8303.5	5716.7	1672.8	1157.0	1123.5	1171.9	1130.9	1023.1	887.9	863.1
62.5°	9221.1	8214.2	5157.4	1207.8	1014.4	1033.0	1078.9	1034.2	921.4	798.6	777.5
65°	9061.2	7873.2	4072.4	941.2	951.1	992.1	1028.0	953.6	746.5	625.0	612.6
67.5°	8624.7	7224.6	2620.3	863.1	915.2	957.3	969.7	807.3	675.8	559.3	545.6
70°	7705.8	5799.8	1009.4	813.5	879.2	897.8	847.0	740.3	621.3	520.8	508.4
72.5°	6028.0	3808.2	582.8	744.0	802.3	785.0	786.2	664.7	560.5	465.0	455.1
75°	3746.2	1379.0	518.3	662.2	679.6	711.8	670.9	576.6	482.4	425.3	412.9
77.5°	1238.8	391.9	479.9	570.4	608.9	585.3	561.7	492.3	412.9	368.3	362.1
80°	300.1	293.9	430.3	446.4	477.4	437.7	435.3	409.2	348.5	322.4	316.2
82.5°	184.8	210.8	342.3	277.8	318.7	322.4	367.1	337.3	254.2	264.1	255.5
85°	114.1	162.4	179.8	133.9	135.2	181.0	219.5	203.4	152.5	143.8	142.6
87.5°	38.4	33.5	38.4	28.5	38.4	65.7	99.2	94.2	63.2	43.4	40.9
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)