

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: P157427

Luminaire Tested: **VST-F12-LED-E-U-5MQ-7060**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157427
REPORT IS SCALED FROM IESNA LM-79-08 TEST DATA (P33708)
Test Lab: INNOVATION CENTER-P3
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VST-F12-LED-E-U-5MQ-7060
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(12) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (84) 5700K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32516.1 lumens
Efficiency: N/A
Efficacy: 106.1 lumens/watt
Luminous Opening: Rectangular (W 2' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

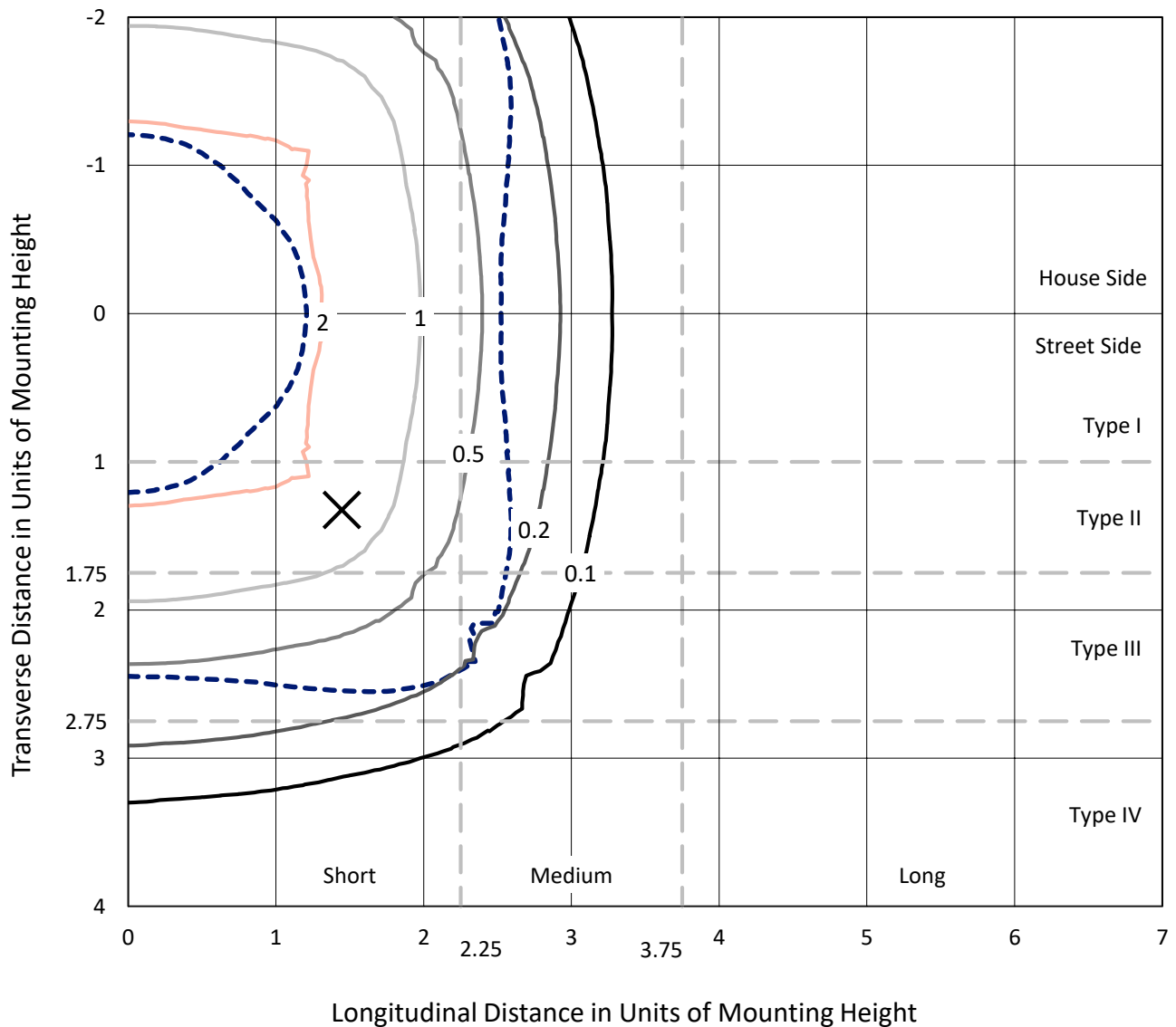
Input Watts (W): 306.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

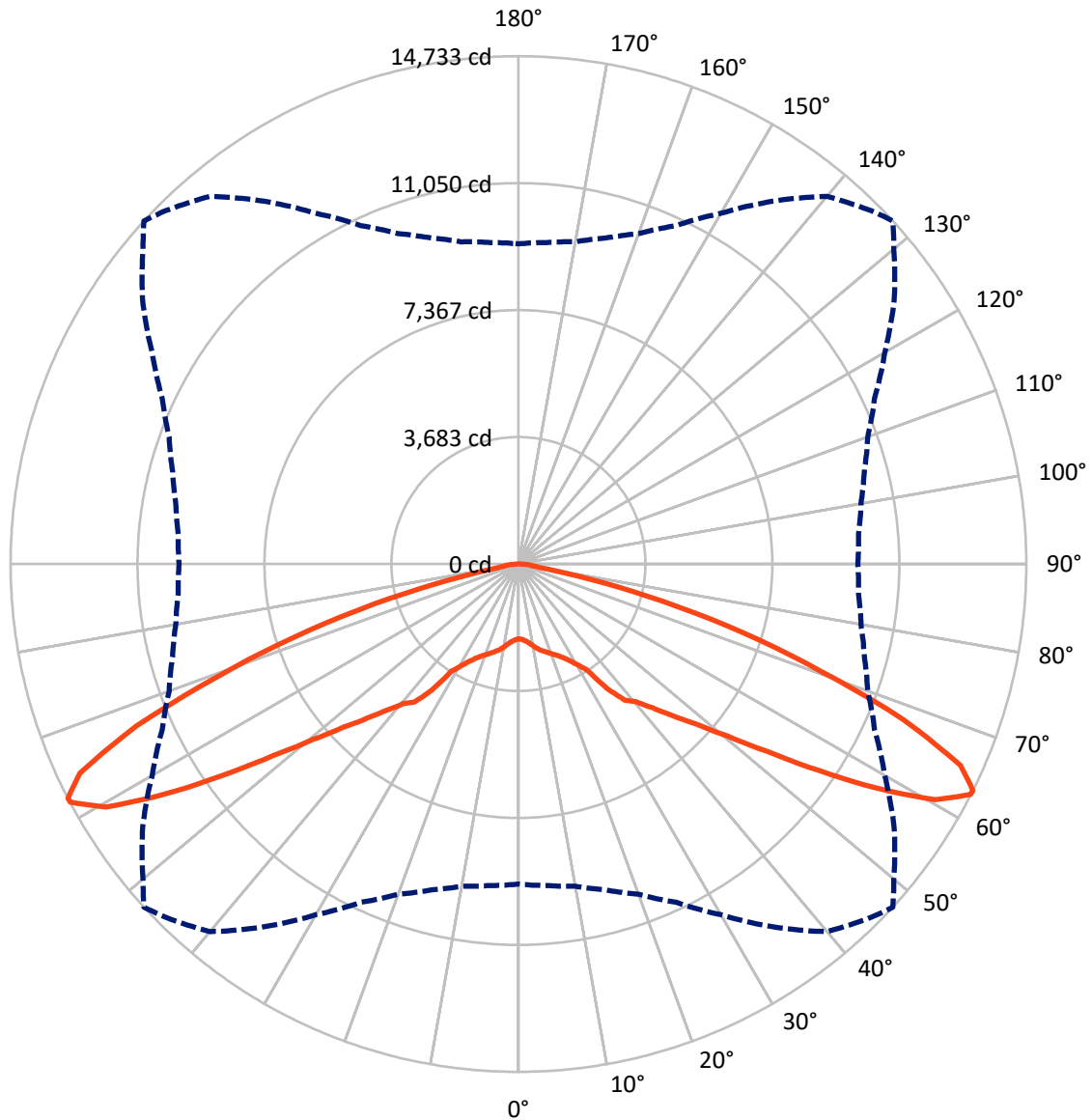
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 2.6 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P157427
CATALOG NUMBER: VST-F12-LED-E-U-5MQ-7060

Luminous Intensity Polar Plot



— Vertical Plane Through 47.5-Deg Lateral - - - Horizontal Cone Through 63-Deg Vertical

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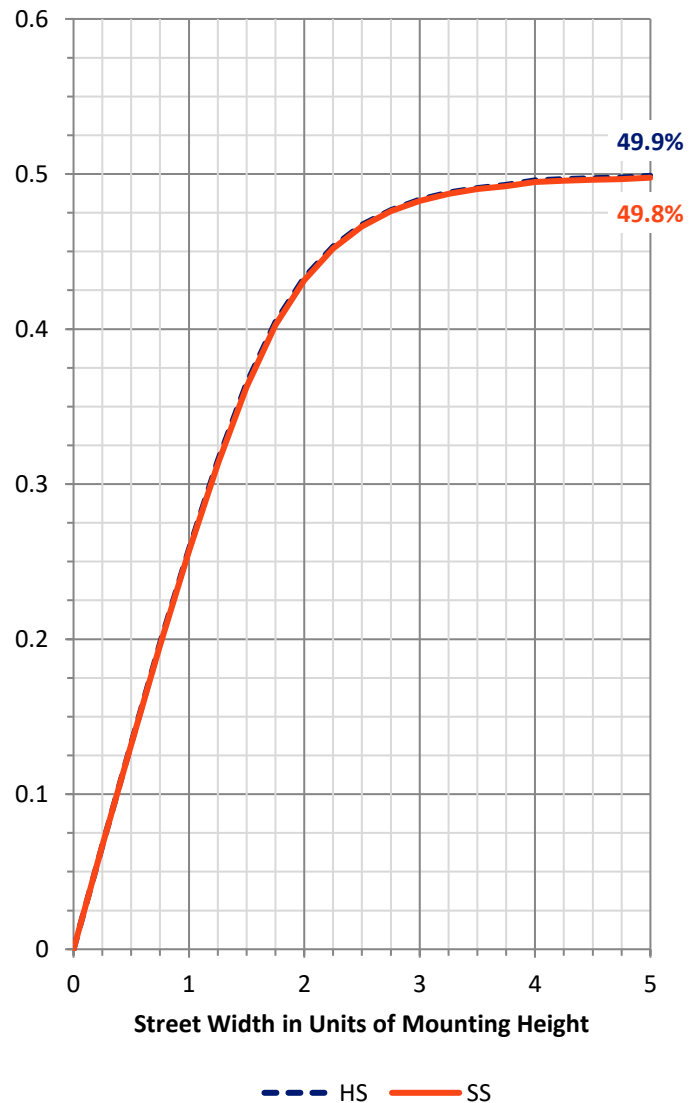
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16258.1	0.0	16258.1
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	16258.1	0.0	16258.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	32516.1	0.0	32516.1
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	218.0	0.7
10°-20°	741.0	2.3
20°-30°	1417.3	4.4
30°-40°	2711.2	8.3
40°-50°	4691.3	14.4
50°-60°	8425.4	25.9
60°-70°	10245.4	31.5
70°-80°	3700.1	11.4
80°-90°	366.5	1.1
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°	32516.1	100.0
0°-180°	32516.1	100.0



REPORT NUMBER: P157427

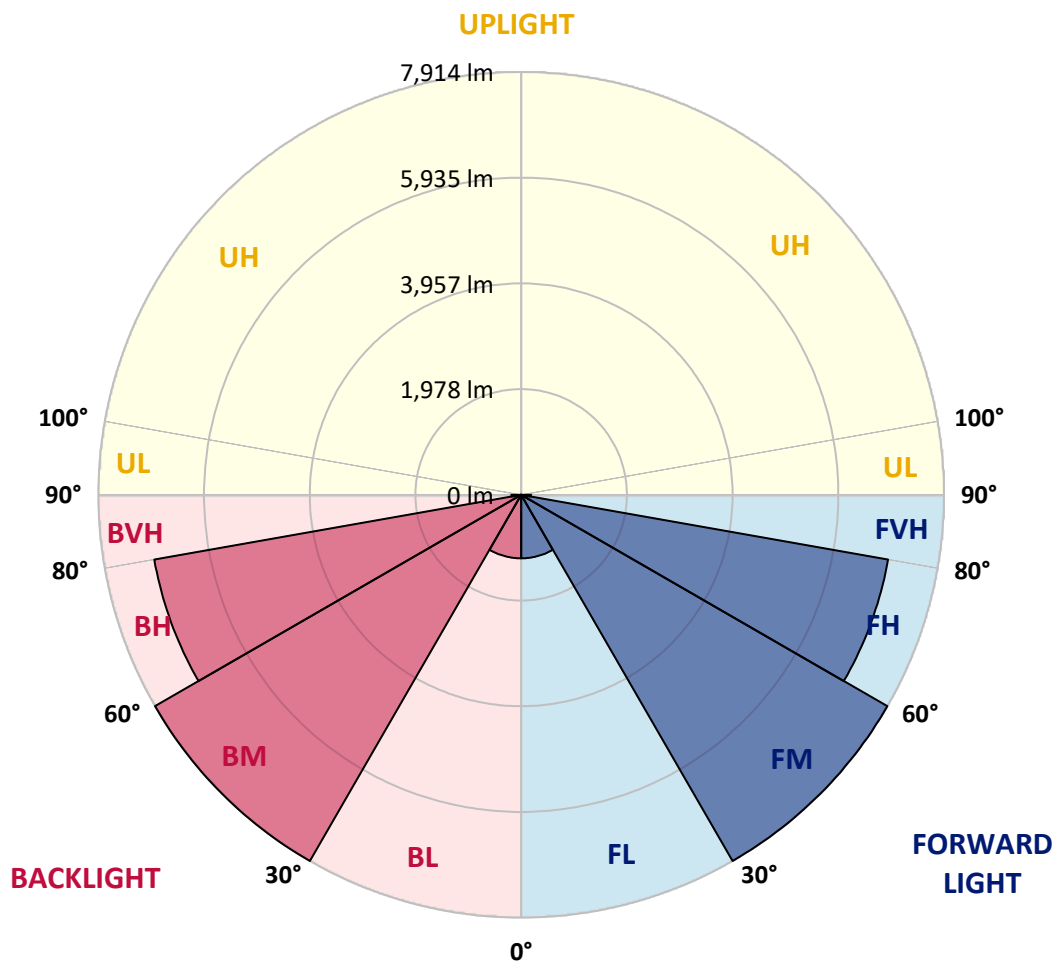
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1188.1	3.7			
FM	(30°-60°)	7914.0	24.3			
FH	(60°-80°)	6972.7	21.4			G3/7500
FVH	(80°-90°)	183.2	0.6			G2/225
BL	(0°-30°)	1188.1	3.7	B3/2500		
BM	(30°-60°)	7914.0	24.3	B4/8500		
BH	(60°-80°)	6972.7	21.4	B5		G3/7500
BVH	(80°-90°)	183.2	0.6			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G3

Type V Short





REPORT NUMBER: P157427

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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	2171.2	2171.2	2171.2	2171.2	2171.2	2171.2	2171.2	2171.2	2171.2	2171.2	2171.2
2.5°	2185.5	2181.4	2183.4	2185.5	2183.4	2181.4	2181.4	2181.4	2185.5	2181.4	2191.6
5°	2228.1	2224.1	2226.1	2226.1	2226.1	2222.0	2222.0	2222.0	2220.0	2222.0	2244.4
7.5°	2309.5	2303.4	2301.3	2305.4	2301.3	2299.3	2297.3	2297.3	2293.2	2293.2	2321.7
10°	2407.1	2398.9	2403.0	2405.0	2398.9	2394.9	2394.9	2394.9	2388.8	2386.7	2423.3
12.5°	2514.8	2510.7	2510.7	2506.7	2504.6	2500.6	2498.5	2500.6	2492.4	2492.4	2529.0
15°	2618.5	2610.3	2612.4	2606.3	2602.2	2598.2	2596.1	2594.1	2590.0	2590.0	2612.4
17.5°	2714.0	2707.9	2705.9	2699.8	2693.7	2687.6	2683.5	2681.5	2675.4	2675.4	2695.7
20°	2813.6	2807.5	2803.5	2793.3	2783.2	2777.1	2768.9	2764.9	2756.7	2758.8	2781.1
22.5°	2927.5	2917.3	2909.2	2901.1	2882.8	2870.6	2860.4	2852.3	2848.2	2848.2	2878.7
25°	3080.0	3073.9	3061.7	3035.2	3012.9	2994.6	2978.3	2970.2	2962.1	2958.0	3004.7
27.5°	3267.0	3260.9	3244.6	3218.2	3187.7	3157.2	3138.9	3124.7	3114.5	3108.4	3175.5
30°	3515.0	3504.9	3490.6	3447.9	3421.5	3374.7	3354.4	3334.1	3311.7	3317.8	3397.1
32.5°	4000.9	3986.7	3942.0	3895.2	3813.9	3750.9	3685.8	3637.0	3590.2	3584.1	3669.5
35°	4442.1	4436.0	4427.8	4395.3	4364.8	4326.2	4295.7	4244.9	4202.2	4192.0	4431.9
37.5°	4679.9	4694.2	4682.0	4677.9	4677.9	4696.2	4753.1	4810.0	4850.7	4875.1	5009.3
40°	5043.8	5043.8	5029.6	5021.5	5005.2	5029.6	5054.0	5096.7	5115.0	5117.0	5253.2
42.5°	5456.5	5458.6	5444.3	5419.9	5411.8	5434.2	5466.7	5507.3	5531.7	5537.8	5696.4
45°	5916.0	5909.9	5897.7	5889.5	5895.6	5916.0	5954.6	6033.9	6070.5	6098.9	6271.7
47.5°	6414.1	6454.7	6420.2	6426.3	6426.3	6489.3	6576.7	6641.8	6700.7	6755.6	6938.6
50°	7066.6	7072.7	7078.8	7097.1	7109.3	7192.7	7302.5	7379.7	7465.1	7536.3	7835.1
52.5°	7938.8	7926.6	7957.1	7977.4	8046.5	8091.3	8274.2	8371.8	8489.7	8581.2	9018.3
55°	8981.7	8975.6	9020.3	9036.6	9128.1	9237.9	9441.2	9654.6	9855.9	9967.7	10565.4
57.5°	9729.8	9746.1	9823.4	9931.1	10110.0	10343.8	10646.7	11118.4	11500.6	11622.6	12281.2
60°	9894.5	9947.4	10063.3	10278.8	10585.7	11020.8	11616.5	12338.2	13037.5	13271.3	13889.3
62.5°	9433.0	9494.0	9664.8	9923.0	10323.5	10967.9	11827.9	12846.4	13885.3	14405.7	14716.8
63°	9286.7	9361.9	9490.0	9788.8	10195.4	10831.7	11746.6	12844.4	13921.9	14489.1	14733.0
65°	8599.5	8613.7	8804.8	9103.7	9561.1	10221.8	11144.8	12413.4	13608.8	14263.4	14094.7
67.5°	7400.1	7459.0	7619.6	7920.5	8365.7	9052.9	10055.1	11228.2	12279.2	12801.7	12047.4
70°	5979.0	5974.9	6174.2	6416.1	6808.5	7412.3	8290.5	9349.7	10183.2	10563.4	9300.9
72.5°	4271.3	4165.6	4312.0	4580.3	4901.5	5383.3	6078.6	6902.0	7648.1	7977.4	6800.3
75°	1945.6	1917.1	2047.2	2313.5	2638.8	3067.8	3639.0	4350.6	5066.2	5452.5	4332.3
77.5°	654.6	662.8	713.6	809.1	984.0	1199.5	1555.2	2010.6	2590.0	2972.2	2033.0
80°	439.1	451.3	467.6	481.8	502.1	534.7	611.9	729.8	908.7	1099.8	642.4
82.5°	359.8	374.1	410.7	426.9	439.1	449.3	455.4	463.5	463.5	467.6	406.6
85°	258.2	282.6	331.4	361.9	374.1	382.2	392.4	404.6	386.3	370.0	315.1
87.5°	89.5	122.0	178.9	197.2	211.4	213.5	227.7	252.1	239.9	195.2	95.6
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):

	50°	55°	60°	65°	70°	75°	80°	85°	90°
0°	2171.2	2171.2	2171.2	2171.2	2171.2	2171.2	2171.2	2171.2	2171.2
2.5°	2181.4	2179.4	2181.4	2183.4	2183.4	2183.4	2185.5	2187.5	2187.5
5°	2222.0	2224.1	2222.0	2224.1	2224.1	2226.1	2226.1	2230.2	2230.2
7.5°	2291.2	2295.2	2293.2	2297.3	2297.3	2301.3	2299.3	2305.4	2305.4
10°	2384.7	2388.8	2392.8	2394.9	2392.8	2396.9	2401.0	2403.0	2401.0
12.5°	2490.4	2492.4	2490.4	2494.5	2494.5	2498.5	2498.5	2504.6	2504.6
15°	2588.0	2586.0	2583.9	2590.0	2594.1	2596.1	2600.2	2606.3	2600.2
17.5°	2675.4	2677.4	2673.4	2679.5	2687.6	2693.7	2697.8	2705.9	2703.9
20°	2762.8	2758.8	2762.8	2773.0	2781.1	2789.3	2797.4	2809.6	2807.5
22.5°	2848.2	2852.3	2862.4	2870.6	2884.8	2897.0	2907.2	2923.4	2929.5
25°	2968.2	2968.2	2984.4	2994.6	3014.9	3031.2	3053.5	3071.8	3082.0
27.5°	3120.6	3120.6	3138.9	3161.3	3191.8	3220.2	3244.6	3269.0	3265.0
30°	3328.0	3338.2	3354.4	3382.9	3423.5	3458.1	3490.6	3515.0	3517.1
32.5°	3600.4	3612.6	3661.4	3734.6	3820.0	3885.0	3933.8	3992.8	4000.9
35°	4218.4	4248.9	4312.0	4370.9	4405.5	4444.1	4468.5	4470.5	4474.6
37.5°	4869.0	4816.1	4767.3	4722.6	4702.3	4698.2	4698.2	4706.4	4710.4
40°	5106.8	5080.4	5058.1	5029.6	5037.7	5035.7	5049.9	5062.1	5070.3
42.5°	5513.4	5493.1	5472.8	5436.2	5456.5	5450.4	5470.8	5489.1	5499.2
45°	6080.6	6017.6	5972.9	5913.9	5934.3	5922.1	5922.1	5944.4	5948.5
47.5°	6706.8	6633.6	6542.1	6468.9	6444.6	6422.2	6442.5	6442.5	6420.2
50°	7457.0	7369.6	7261.8	7143.9	7103.2	7080.9	7089.0	7099.2	7036.1
52.5°	8475.5	8377.9	8225.4	8046.5	8007.9	7989.6	7985.6	7971.3	7955.1
55°	9855.9	9672.9	9485.9	9250.1	9178.9	9158.6	9160.6	9144.4	9183.0
57.5°	11484.3	11216.0	10785.0	10498.3	10327.5	10262.5	10203.5	10179.1	10181.2
60°	13096.5	12549.6	11905.1	11405.0	11047.2	10819.5	10640.6	10541.0	10512.5
62.5°	14135.3	13275.4	12307.7	11496.5	10909.0	10532.9	10250.3	10071.4	10014.5
63°	14216.6	13305.9	12271.1	11401.0	10782.9	10388.5	10091.7	9906.7	9845.7
65°	14039.8	12998.9	11793.3	10756.5	10079.5	9642.4	9321.2	9146.4	9099.6
67.5°	12665.5	11799.4	10571.5	9500.1	8817.0	8373.9	8005.9	7839.2	7786.3
70°	10303.2	9709.5	8703.2	7788.4	7152.0	6725.1	6353.1	6214.8	6212.8
72.5°	7637.9	6867.4	6267.7	5596.8	5041.8	4702.3	4379.0	4224.5	4147.3
75°	5052.0	4226.6	3555.7	2990.5	2437.5	2132.6	1768.7	1612.2	1520.7
77.5°	2545.3	1886.6	1351.9	937.2	727.8	597.7	546.9	520.4	518.4
80°	847.8	636.3	546.9	512.3	502.1	504.2	498.1	487.9	475.7
82.5°	469.6	494.0	498.1	483.8	483.8	475.7	467.6	429.0	408.6
85°	402.5	443.2	447.3	439.1	437.1	424.9	410.7	357.8	327.3
87.5°	252.1	290.7	284.6	254.1	280.6	262.3	248.0	160.6	117.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)