

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: P157408

Luminaire Tested: **VST-E11-LED-E-U-5MQ-8030**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157408
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-E11-LED-E-U-5MQ-8030
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(11) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (231) 3000K CCT, 80 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29697.9 lumens
Efficiency: N/A
Efficacy: 110.1 lumens/watt
Luminous Opening: Rectangular (W 1.83' x L: 1' x H: 0')
IES Classification: Type V - Short - Full Cutoff
BUG Rating: B5 - U0 - G3

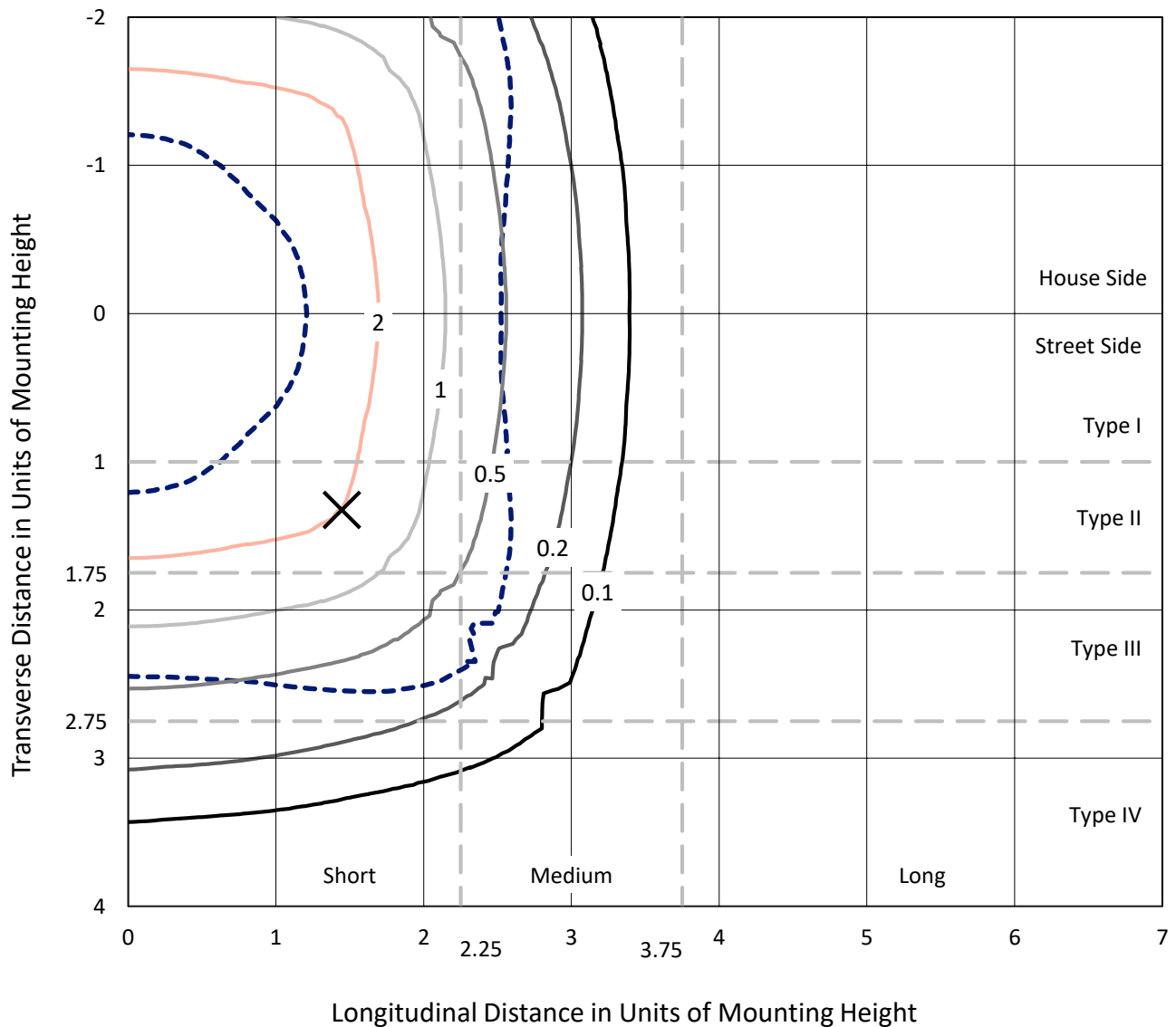
Input Watts (W): 269.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

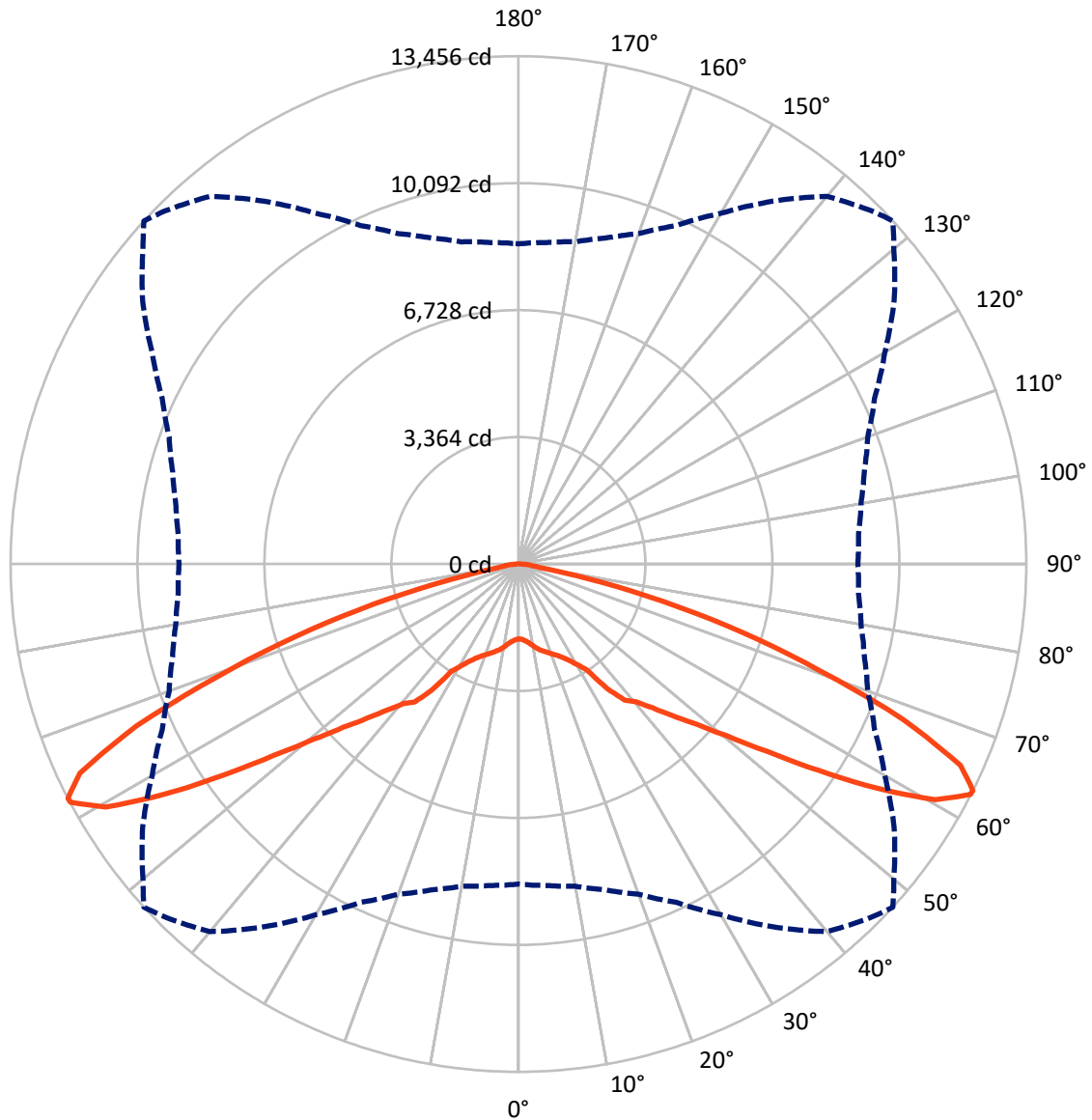
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.5 fc
 Type V - Short - Full Cutoff

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Luminous Intensity Polar Plot



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

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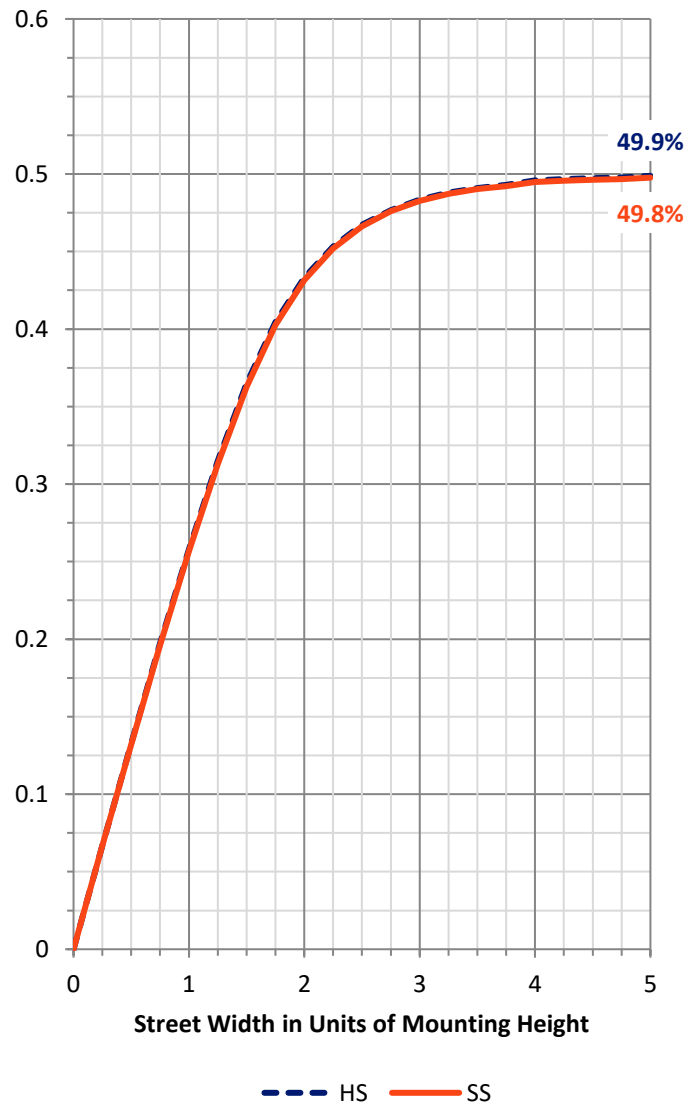
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14849.0	0.0	14849.0
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	14849.0	0.0	14849.0
	% Fixture	50.0	0.0	50.0
Total	Lumens	29697.9	0.0	29697.9
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	199.1	0.7
10°-20°	676.7	2.3
20°-30°	1294.5	4.4
30°-40°	2476.2	8.3
40°-50°	4284.7	14.4
50°-60°	7695.1	25.9
60°-70°	9357.4	31.5
70°-80°	3379.4	11.4
80°-90°	334.7	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°	29697.9	100.0
0°-180°	29697.9	100.0



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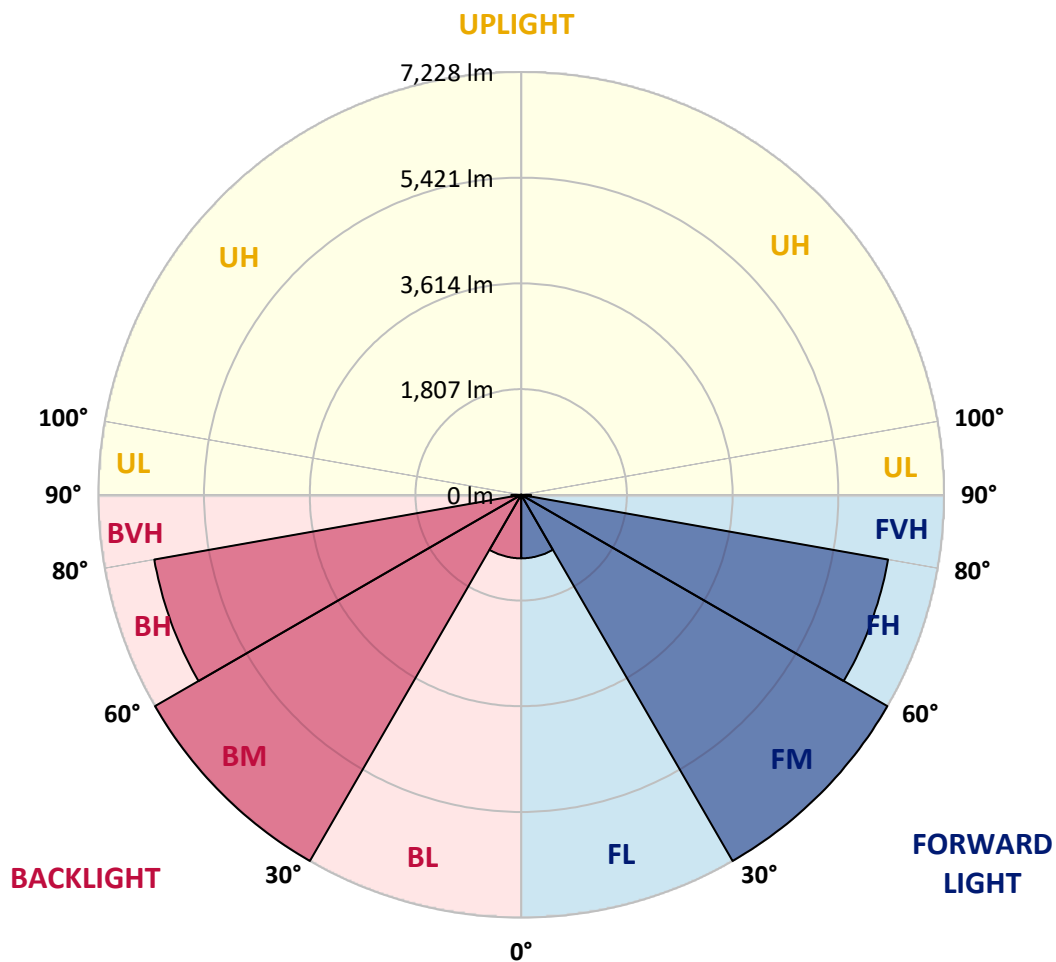
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1085.2	3.7			
FM	(30°-60°)	7228.0	24.3			
FH	(60°-80°)	6368.4	21.4			G3/7500
FVH	(80°-90°)	167.4	0.6			G2/225
BL	(0°-30°)	1085.2	3.7	B3/2500		
BM	(30°-60°)	7228.0	24.3	B4/8500		
BH	(60°-80°)	6368.4	21.4	B5		G3/7500
BVH	(80°-90°)	167.4	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	1983.0	1983.0	1983.0	1983.0	1983.0	1983.0	1983.0	1983.0	1983.0	1983.0	1983.0
2.5°	1996.0	1992.3	1994.2	1996.0	1994.2	1992.3	1992.3	1992.3	1996.0	1992.3	2001.6
5°	2035.0	2031.3	2033.2	2033.2	2033.2	2029.5	2029.5	2029.5	2027.6	2029.5	2049.9
7.5°	2109.3	2103.7	2101.9	2105.6	2101.9	2100.0	2098.2	2098.2	2094.4	2094.4	2120.4
10°	2198.4	2191.0	2194.7	2196.6	2191.0	2187.3	2187.3	2187.3	2181.7	2179.9	2213.3
12.5°	2296.8	2293.1	2293.1	2289.4	2287.6	2283.8	2282.0	2283.8	2276.4	2276.4	2309.8
15°	2391.5	2384.1	2386.0	2380.4	2376.7	2373.0	2371.1	2369.3	2365.5	2365.5	2386.0
17.5°	2478.8	2473.2	2471.4	2465.8	2460.2	2454.7	2450.9	2449.1	2443.5	2443.5	2462.1
20°	2569.8	2564.2	2560.5	2551.2	2541.9	2536.4	2528.9	2525.2	2517.8	2519.7	2540.1
22.5°	2673.8	2664.5	2657.1	2649.6	2632.9	2621.8	2612.5	2605.1	2601.3	2601.3	2629.2
25°	2813.0	2807.5	2796.3	2772.2	2751.7	2735.0	2720.2	2712.8	2705.3	2701.6	2744.3
27.5°	2983.8	2978.3	2963.4	2939.3	2911.4	2883.6	2866.9	2853.9	2844.6	2839.0	2900.3
30°	3210.4	3201.1	3188.1	3149.1	3125.0	3082.3	3063.7	3045.1	3024.7	3030.3	3102.7
32.5°	3654.1	3641.1	3600.3	3557.6	3483.3	3425.8	3366.3	3321.8	3279.1	3273.5	3351.5
35°	4057.1	4051.5	4044.1	4014.4	3986.5	3951.2	3923.4	3877.0	3838.0	3828.7	4047.8
37.5°	4274.3	4287.3	4276.2	4272.5	4272.5	4289.2	4341.2	4393.1	4430.3	4452.6	4575.1
40°	4606.7	4606.7	4593.7	4586.2	4571.4	4593.7	4616.0	4654.9	4671.7	4673.5	4797.9
42.5°	4983.6	4985.5	4972.5	4950.2	4942.7	4963.2	4992.9	5030.0	5052.3	5057.9	5202.7
45°	5403.2	5397.7	5386.5	5379.1	5384.7	5403.2	5438.5	5510.9	5544.3	5570.3	5728.2
47.5°	5858.1	5895.3	5863.7	5869.3	5869.3	5926.8	6006.7	6066.1	6119.9	6170.1	6337.2
50°	6454.2	6459.7	6465.3	6482.0	6493.2	6569.3	6669.6	6740.1	6818.1	6883.1	7156.0
52.5°	7250.7	7239.6	7267.4	7286.0	7349.1	7390.0	7557.1	7646.2	7753.9	7837.5	8236.7
55°	8203.3	8197.7	8238.5	8253.4	8336.9	8437.2	8622.9	8817.8	9001.7	9103.8	9649.7
57.5°	8886.5	8901.4	8972.0	9070.4	9233.8	9447.3	9724.0	10154.7	10503.8	10615.2	11216.8
60°	9036.9	9085.2	9191.1	9387.9	9668.3	10065.6	10609.6	11268.8	11907.5	12121.1	12685.5
62.5°	8615.5	8671.2	8827.1	9062.9	9428.7	10017.3	10802.7	11733.0	12681.8	13157.1	13441.2
63°	8481.8	8550.5	8667.4	8940.4	9311.8	9892.9	10728.5	11731.1	12715.2	13233.3	13456.1
65°	7854.2	7867.2	8041.7	8314.7	8732.4	9335.9	10178.9	11337.5	12429.3	13027.2	12873.1
67.5°	6758.7	6812.5	6959.2	7234.0	7640.6	8268.2	9183.6	10255.0	11215.0	11692.1	11003.3
70°	5460.8	5457.1	5639.0	5860.0	6218.4	6769.8	7571.9	8539.3	9300.6	9647.8	8494.8
72.5°	3901.1	3804.5	3938.2	4183.3	4476.7	4916.8	5551.8	6303.8	6985.2	7286.0	6210.9
75°	1776.9	1750.9	1869.8	2113.0	2410.1	2801.9	3323.6	3973.5	4627.1	4979.9	3956.8
77.5°	597.9	605.3	651.7	739.0	898.7	1095.5	1420.4	1836.4	2365.5	2714.6	1856.8
80°	401.1	412.2	427.1	440.1	458.6	488.3	558.9	666.6	830.0	1004.5	586.7
82.5°	328.7	341.6	375.1	389.9	401.1	410.3	415.9	423.3	423.3	427.1	371.4
85°	235.8	258.1	302.7	330.5	341.6	349.1	358.4	369.5	352.8	337.9	287.8
87.5°	81.7	111.4	163.4	180.1	193.1	195.0	208.0	230.2	219.1	178.3	87.3
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°	1983.0	1983.0	1983.0	1983.0	1983.0	1983.0	1983.0	1983.0	1983.0
2.5°	1992.3	1990.5	1992.3	1994.2	1994.2	1994.2	1996.0	1997.9	1997.9
5°	2029.5	2031.3	2029.5	2031.3	2031.3	2033.2	2033.2	2036.9	2036.9
7.5°	2092.6	2096.3	2094.4	2098.2	2098.2	2101.9	2100.0	2105.6	2105.6
10°	2178.0	2181.7	2185.4	2187.3	2185.4	2189.1	2192.9	2194.7	2192.9
12.5°	2274.6	2276.4	2274.6	2278.3	2278.3	2282.0	2282.0	2287.6	2287.6
15°	2363.7	2361.8	2360.0	2365.5	2369.3	2371.1	2374.8	2380.4	2374.8
17.5°	2443.5	2445.4	2441.7	2447.2	2454.7	2460.2	2463.9	2471.4	2469.5
20°	2523.4	2519.7	2523.4	2532.6	2540.1	2547.5	2554.9	2566.1	2564.2
22.5°	2601.3	2605.1	2614.3	2621.8	2634.8	2645.9	2655.2	2670.0	2675.6
25°	2710.9	2710.9	2725.8	2735.0	2753.6	2768.5	2788.9	2805.6	2814.9
27.5°	2850.2	2850.2	2866.9	2887.3	2915.1	2941.1	2963.4	2985.7	2982.0
30°	3039.5	3048.8	3063.7	3089.7	3126.8	3158.4	3188.1	3210.4	3212.2
32.5°	3288.4	3299.5	3344.1	3410.9	3488.9	3548.3	3592.9	3646.7	3654.1
35°	3852.8	3880.7	3938.2	3992.1	4023.6	4058.9	4081.2	4083.1	4086.8
37.5°	4447.0	4398.7	4354.1	4313.3	4294.7	4291.0	4291.0	4298.4	4302.2
40°	4664.2	4640.1	4619.7	4593.7	4601.1	4599.2	4612.2	4623.4	4630.8
42.5°	5035.6	5017.0	4998.5	4965.0	4983.6	4978.0	4996.6	5013.3	5022.6
45°	5553.6	5496.1	5455.2	5401.4	5419.9	5408.8	5408.8	5429.2	5432.9
47.5°	6125.5	6058.7	5975.1	5908.3	5886.0	5865.6	5884.1	5884.1	5863.7
50°	6810.7	6730.8	6632.4	6524.7	6487.6	6467.2	6474.6	6483.9	6426.3
52.5°	7740.9	7651.8	7512.5	7349.1	7313.9	7297.1	7293.4	7280.4	7265.6
55°	9001.7	8834.6	8663.7	8448.3	8383.4	8364.8	8366.7	8351.8	8387.1
57.5°	10489.0	10243.9	9850.2	9588.4	9432.4	9373.0	9319.2	9296.9	9298.8
60°	11961.4	11461.9	10873.3	10416.5	10089.7	9881.8	9718.4	9627.4	9601.4
62.5°	12910.2	12124.8	11240.9	10500.1	9963.5	9620.0	9361.9	9198.5	9146.5
63°	12984.5	12152.6	11207.5	10412.8	9848.4	9488.1	9217.1	9048.1	8992.4
65°	12822.9	11872.3	10771.2	9824.2	9205.9	8806.7	8513.3	8353.7	8310.9
67.5°	11567.7	10776.8	9655.3	8676.7	8052.9	7648.1	7312.0	7159.7	7111.5
70°	9410.2	8868.0	7948.9	7113.3	6532.2	6142.2	5802.4	5676.2	5674.3
72.5°	6975.9	6272.2	5724.5	5111.7	4604.8	4294.7	3999.5	3858.4	3787.8
75°	4614.1	3860.2	3247.5	2731.3	2226.3	1947.8	1615.4	1472.4	1388.9
77.5°	2324.7	1723.1	1234.8	856.0	664.7	545.9	499.5	475.3	473.5
80°	774.3	581.2	499.5	467.9	458.6	460.5	454.9	445.6	434.5
82.5°	428.9	451.2	454.9	441.9	441.9	434.5	427.1	391.8	373.2
85°	367.6	404.8	408.5	401.1	399.2	388.1	375.1	326.8	298.9
87.5°	230.2	265.5	259.9	232.1	256.2	239.5	226.5	146.7	107.7
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)