

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: P157415

Luminaire Tested: **VST-F11-LED-E-U-5MQ**

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157415
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-F11-LED-E-U-5MQ
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(11) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (77) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29048.1 lumens
Efficiency: N/A
Efficacy: 102.8 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

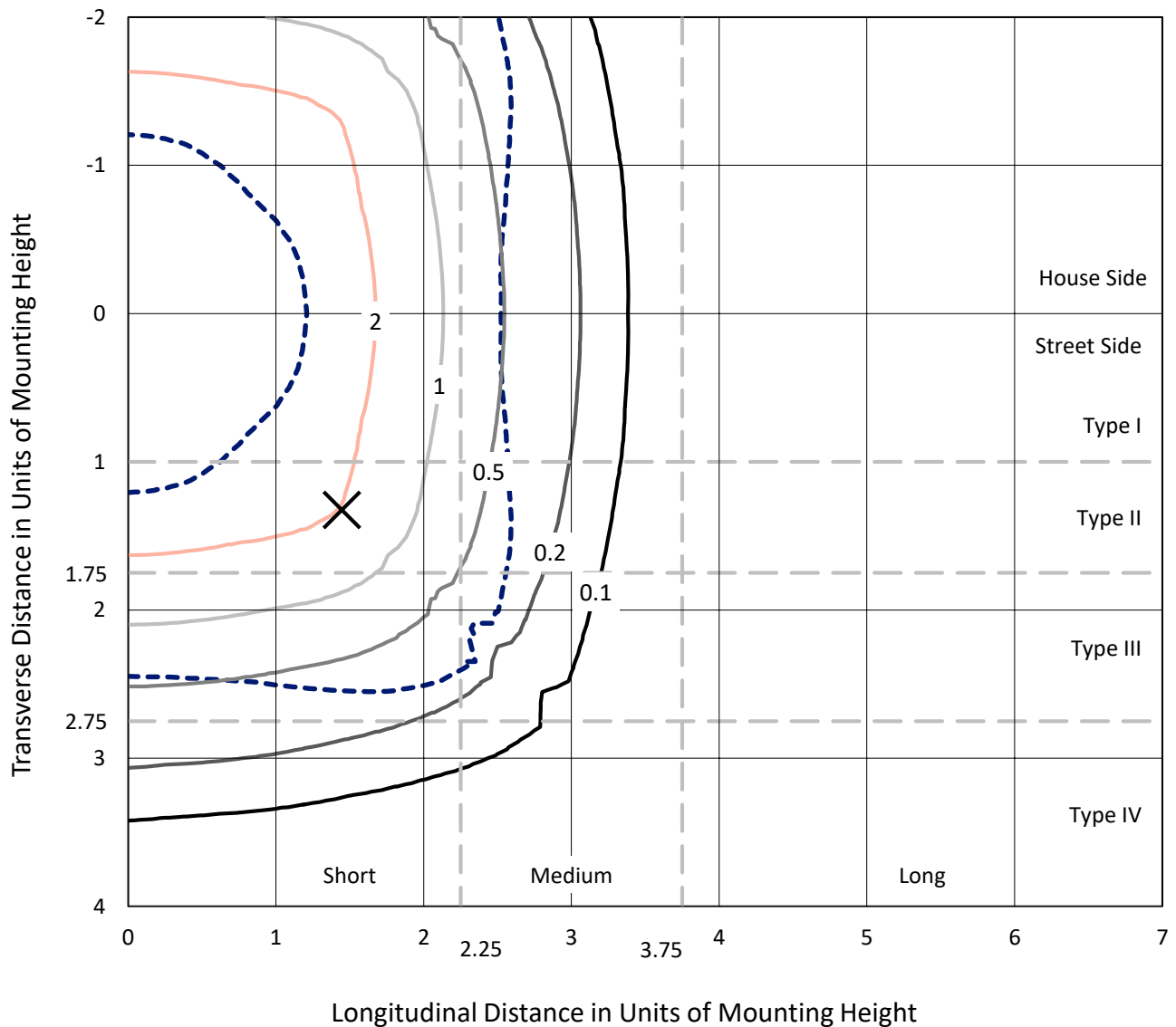
Input Watts (W): 282.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

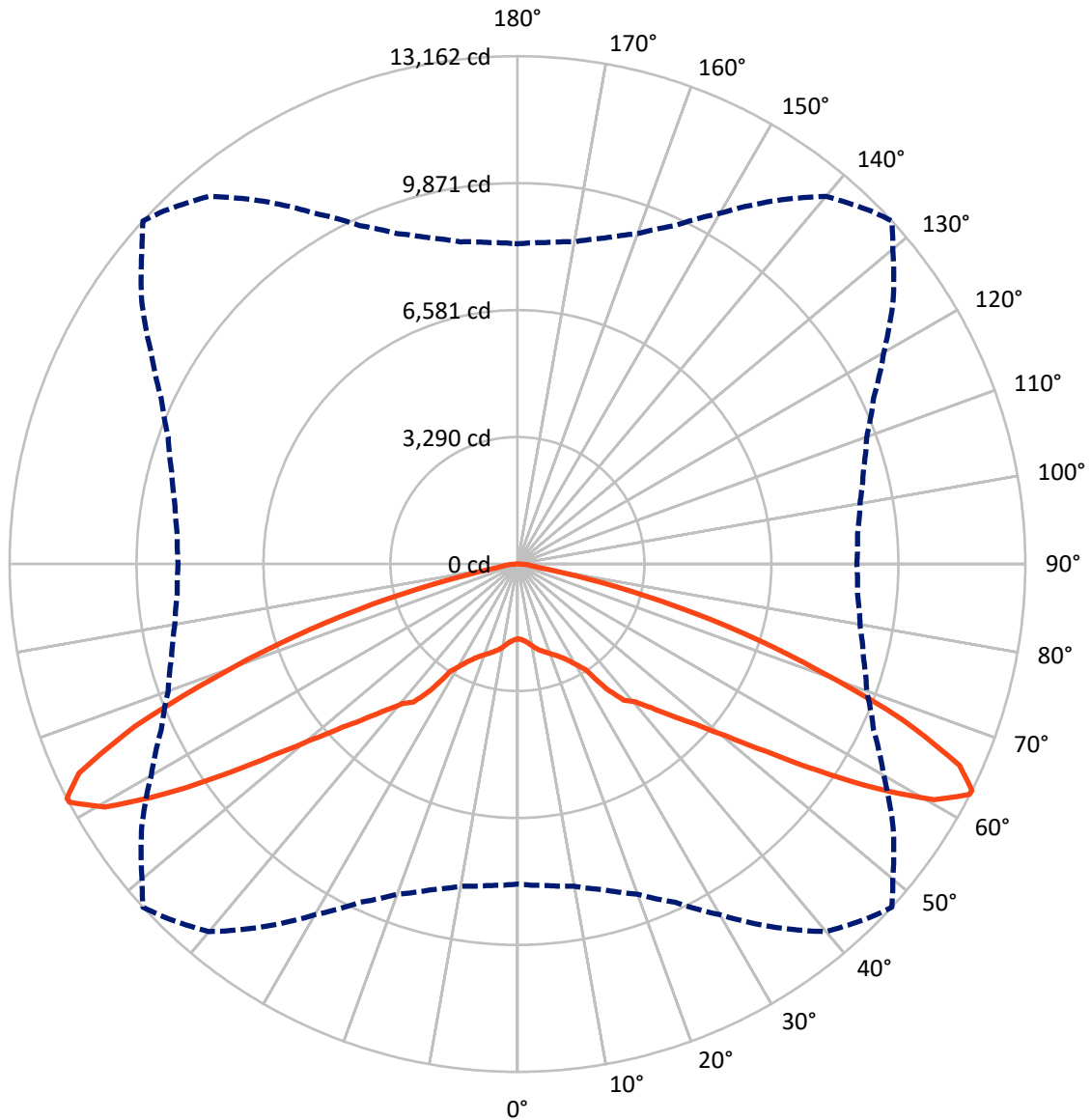
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.4 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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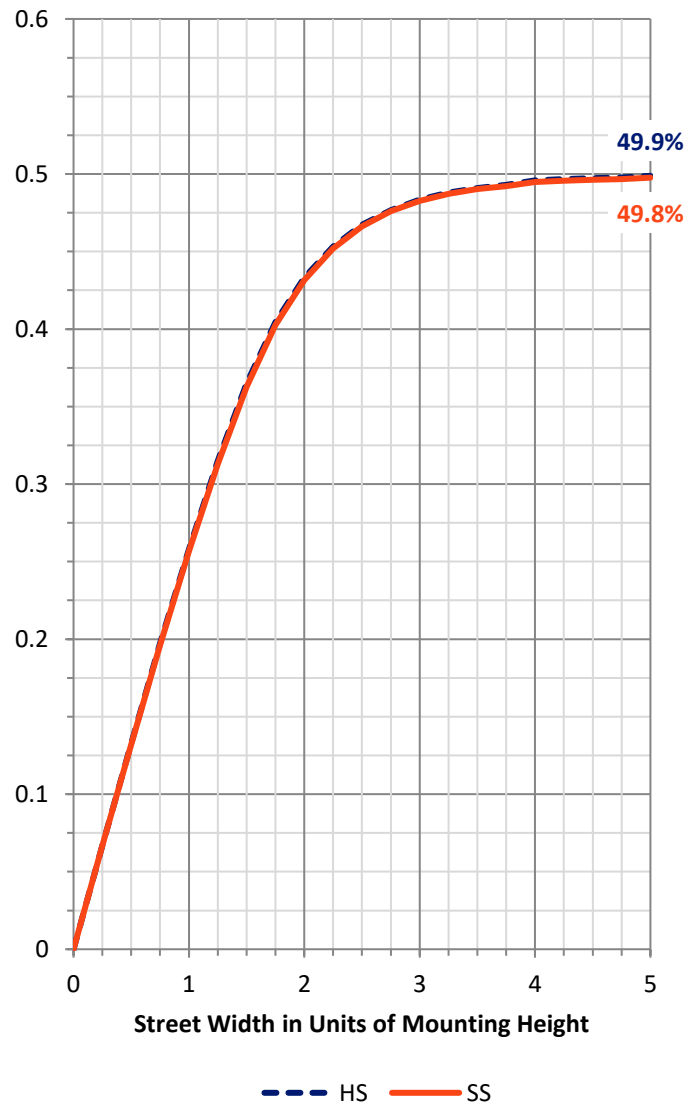
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	14524.1	0.0	14524.1
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	14524.1	0.0	14524.1
	% Fixture	50.0	0.0	50.0
Total	Lumens	29048.1	0.0	29048.1
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	194.7	0.7
10°-20°	661.9	2.3
20°-30°	1266.2	4.4
30°-40°	2422.1	8.3
40°-50°	4191.0	14.4
50°-60°	7526.8	25.9
60°-70°	9152.6	31.5
70°-80°	3305.5	11.4
80°-90°	327.4	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°	29048.1	100.0
0°-180°	29048.1	100.0

Coefficient of Utilization



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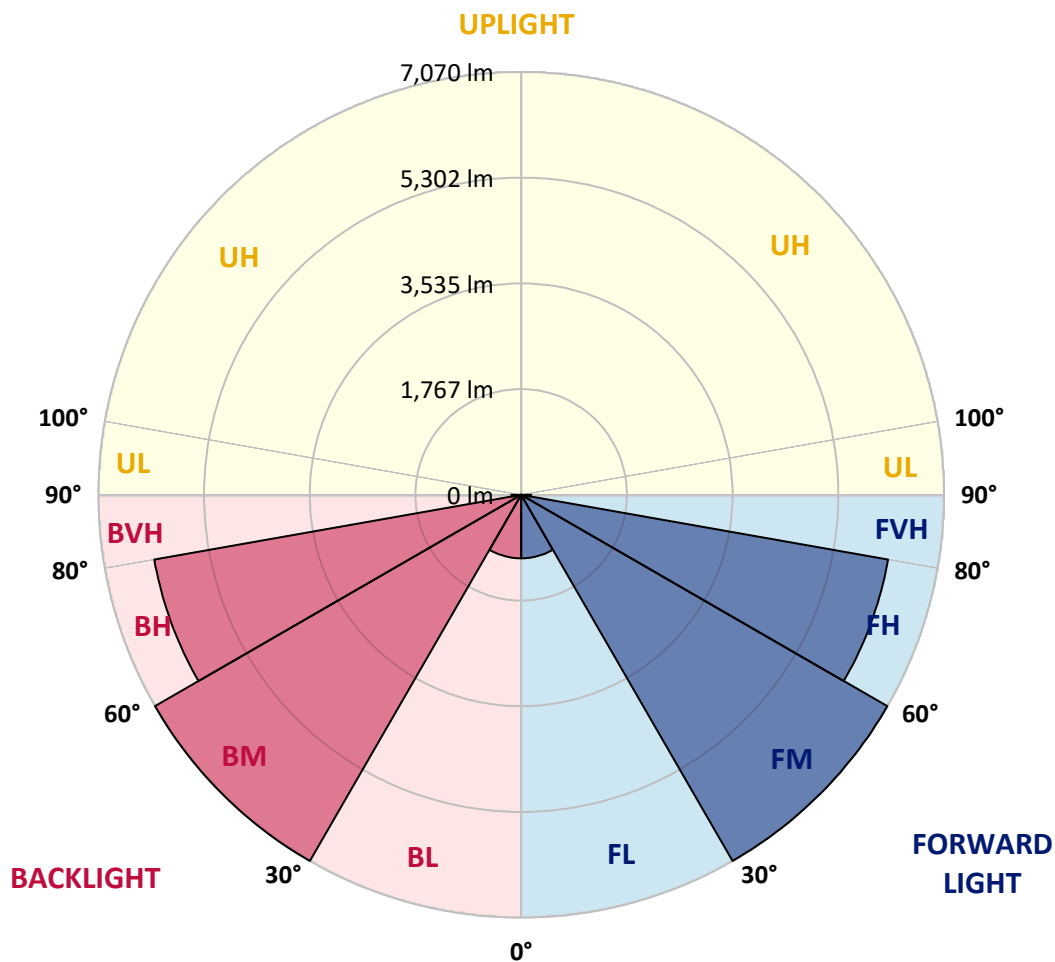
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1061.4	3.7			
FM	(30°-60°)	7069.9	24.3			
FH	(60°-80°)	6229.1	21.4			G3/7500
FVH	(80°-90°)	163.7	0.6			G2/225
BL	(0°-30°)	1061.4	3.7	B3/2500		
BM	(30°-60°)	7069.9	24.3	B4/8500		
BH	(60°-80°)	6229.1	21.4	B5		G3/7500
BVH	(80°-90°)	163.7	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°	1939.7	1939.7	1939.7	1939.7	1939.7	1939.7	1939.7	1939.7	1939.7	1939.7	1939.7
2.5°	1952.4	1948.7	1950.6	1952.4	1950.6	1948.7	1948.7	1948.7	1952.4	1948.7	1957.8
5°	1990.5	1986.9	1988.7	1988.7	1988.7	1985.1	1985.1	1985.1	1983.2	1985.1	2005.0
7.5°	2063.2	2057.7	2055.9	2059.5	2055.9	2054.1	2052.3	2052.3	2048.6	2048.6	2074.0
10°	2150.3	2143.1	2146.7	2148.5	2143.1	2139.4	2139.4	2139.4	2134.0	2132.2	2164.9
12.5°	2246.6	2243.0	2243.0	2239.3	2237.5	2233.9	2232.1	2233.9	2226.6	2226.6	2259.3
15°	2339.2	2331.9	2333.8	2328.3	2324.7	2321.0	2319.2	2317.4	2313.8	2313.8	2333.8
17.5°	2424.6	2419.1	2417.3	2411.9	2406.4	2401.0	2397.3	2395.5	2390.1	2390.1	2408.2
20°	2513.6	2508.1	2504.5	2495.4	2486.3	2480.9	2473.6	2470.0	2462.7	2464.5	2484.5
22.5°	2615.3	2606.2	2598.9	2591.7	2575.3	2564.4	2555.3	2548.1	2544.4	2544.4	2571.7
25°	2751.5	2746.0	2735.1	2711.5	2691.5	2675.2	2660.7	2653.4	2646.1	2642.5	2684.3
27.5°	2918.6	2913.1	2898.6	2875.0	2847.7	2820.5	2804.1	2791.4	2782.3	2776.9	2836.8
30°	3140.1	3131.1	3118.3	3080.2	3056.6	3014.8	2996.7	2978.5	2958.5	2964.0	3034.8
32.5°	3574.2	3561.5	3521.5	3479.8	3407.1	3350.8	3292.7	3249.1	3207.3	3201.9	3278.2
35°	3968.3	3962.8	3955.6	3926.5	3899.3	3864.8	3837.5	3792.1	3754.0	3744.9	3959.2
37.5°	4180.8	4193.5	4182.6	4179.0	4179.0	4195.3	4246.2	4297.0	4333.3	4355.1	4475.0
40°	4505.9	4505.9	4493.2	4485.9	4471.4	4493.2	4515.0	4553.1	4569.4	4571.3	4692.9
42.5°	4874.6	4876.4	4863.7	4841.9	4834.6	4854.6	4883.6	4920.0	4941.8	4947.2	5088.9
45°	5285.0	5279.6	5268.7	5261.4	5266.8	5285.0	5319.5	5390.3	5423.0	5448.5	5602.8
47.5°	5730.0	5766.3	5735.4	5740.9	5740.9	5797.2	5875.3	5933.4	5986.0	6035.1	6198.5
50°	6313.0	6318.4	6323.9	6340.2	6351.1	6425.6	6523.6	6592.6	6668.9	6732.5	6999.5
52.5°	7092.1	7081.2	7108.4	7126.6	7188.3	7228.3	7391.8	7478.9	7584.3	7666.0	8056.5
55°	8023.8	8018.3	8058.3	8072.8	8154.5	8252.6	8434.2	8624.9	8804.7	8904.6	9438.6
57.5°	8692.1	8706.6	8775.7	8871.9	9031.7	9240.6	9511.2	9932.6	10274.0	10383.0	10971.4
60°	8839.2	8886.4	8990.0	9182.5	9456.7	9845.4	10377.5	11022.2	11647.0	11855.9	12408.0
62.5°	8427.0	8481.4	8634.0	8864.7	9222.4	9798.2	10566.4	11476.3	12404.3	12869.3	13147.1
63°	8296.2	8363.4	8477.8	8744.8	9108.0	9676.5	10493.7	11474.5	12437.0	12943.7	13161.7
65°	7682.3	7695.0	7865.8	8132.7	8541.4	9131.6	9956.2	11089.4	12157.3	12742.1	12591.4
67.5°	6610.8	6663.5	6806.9	7075.7	7473.5	8087.3	8982.7	10030.6	10969.6	11436.3	10762.5
70°	5341.3	5337.7	5515.7	5731.8	6082.3	6621.7	7406.3	8352.5	9097.1	9436.7	8308.9
72.5°	3815.7	3721.3	3852.1	4091.8	4378.7	4809.2	5430.3	6165.8	6832.4	7126.6	6075.0
75°	1738.1	1712.6	1828.9	2066.8	2357.4	2740.6	3250.9	3886.6	4525.9	4870.9	3870.2
77.5°	584.8	592.1	637.5	722.8	879.0	1071.5	1389.4	1796.2	2313.8	2655.2	1816.2
80°	392.3	403.2	417.7	430.4	448.6	477.6	546.7	652.0	811.8	982.5	573.9
82.5°	321.5	334.2	366.9	381.4	392.3	401.4	406.8	414.1	414.1	417.7	363.2
85°	230.7	252.4	296.0	323.3	334.2	341.4	350.5	361.4	345.1	330.5	281.5
87.5°	79.9	109.0	159.8	176.2	188.9	190.7	203.4	225.2	214.3	174.4	85.4
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°	1939.7	1939.7	1939.7	1939.7	1939.7	1939.7	1939.7	1939.7	1939.7
2.5°	1948.7	1946.9	1948.7	1950.6	1950.6	1950.6	1952.4	1954.2	1954.2
5°	1985.1	1986.9	1985.1	1986.9	1986.9	1988.7	1988.7	1992.3	1992.3
7.5°	2046.8	2050.4	2048.6	2052.3	2052.3	2055.9	2054.1	2059.5	2059.5
10°	2130.3	2134.0	2137.6	2139.4	2137.6	2141.2	2144.9	2146.7	2144.9
12.5°	2224.8	2226.6	2224.8	2228.4	2228.4	2232.1	2232.1	2237.5	2237.5
15°	2312.0	2310.1	2308.3	2313.8	2317.4	2319.2	2322.9	2328.3	2322.9
17.5°	2390.1	2391.9	2388.2	2393.7	2401.0	2406.4	2410.0	2417.3	2415.5
20°	2468.2	2464.5	2468.2	2477.2	2484.5	2491.8	2499.0	2509.9	2508.1
22.5°	2544.4	2548.1	2557.1	2564.4	2577.1	2588.0	2597.1	2611.6	2617.1
25°	2651.6	2651.6	2666.1	2675.2	2693.4	2707.9	2727.9	2744.2	2753.3
27.5°	2787.8	2787.8	2804.1	2824.1	2851.4	2876.8	2898.6	2920.4	2916.7
30°	2973.0	2982.1	2996.7	3022.1	3058.4	3089.3	3118.3	3140.1	3141.9
32.5°	3216.4	3227.3	3270.9	3336.3	3412.6	3470.7	3514.3	3566.9	3574.2
35°	3768.5	3795.8	3852.1	3904.7	3935.6	3970.1	3991.9	3993.7	3997.4
37.5°	4349.7	4302.5	4258.9	4218.9	4200.8	4197.1	4197.1	4204.4	4208.0
40°	4562.2	4538.6	4518.6	4493.2	4500.4	4498.6	4511.3	4522.2	4529.5
42.5°	4925.4	4907.3	4889.1	4856.4	4874.6	4869.1	4887.3	4903.6	4912.7
45°	5432.1	5375.8	5335.9	5283.2	5301.4	5290.5	5290.5	5310.4	5314.1
47.5°	5991.5	5926.1	5844.4	5779.0	5757.2	5737.2	5755.4	5755.4	5735.4
50°	6661.7	6583.6	6487.3	6382.0	6345.6	6325.7	6332.9	6342.0	6285.7
52.5°	7571.5	7484.4	7348.2	7188.3	7153.8	7137.5	7133.9	7121.1	7106.6
55°	8804.7	8641.3	8474.2	8263.5	8199.9	8181.8	8183.6	8169.1	8203.6
57.5°	10259.5	10019.7	9634.7	9378.6	9226.1	9167.9	9115.3	9093.5	9095.3
60°	11699.7	11211.1	10635.4	10188.6	9869.0	9665.6	9505.8	9416.8	9391.3
62.5°	12627.7	11859.5	10995.0	10270.4	9745.5	9409.5	9157.1	8997.2	8946.4
63°	12700.4	11886.7	10962.3	10185.0	9632.9	9280.6	9015.4	8850.1	8795.6
65°	12542.4	11612.5	10535.5	9609.3	9004.5	8614.0	8327.1	8170.9	8129.1
67.5°	11314.6	10541.0	9444.0	8486.9	7876.7	7480.7	7152.0	7003.1	6955.9
70°	9204.3	8674.0	7775.0	6957.7	6389.2	6007.8	5675.5	5552.0	5550.2
72.5°	6823.3	6135.0	5599.2	4999.9	4504.1	4200.8	3912.0	3774.0	3705.0
75°	4513.1	3775.8	3176.5	2671.6	2177.6	1905.1	1580.1	1440.2	1358.5
77.5°	2273.8	1685.4	1207.7	837.2	650.2	533.9	488.5	464.9	463.1
80°	757.3	568.5	488.5	457.7	448.6	450.4	445.0	435.9	425.0
82.5°	419.5	441.3	445.0	432.2	432.2	425.0	417.7	383.2	365.0
85°	359.6	395.9	399.6	392.3	390.5	379.6	366.9	319.6	292.4
87.5°	225.2	259.7	254.3	227.0	250.6	234.3	221.6	143.5	105.3
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)