

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: P157425

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

Issue Date: 3/3/2020

Test Information

Test Method: LM-79-08
Report Number: P157425
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
Description: VENTUS LED SITE/ROADWAY LUMINAIRE
(12) LIGHTBARS WITH AccuLED OPTICS - TYPE 5 SQUARE MEDIUM
Light Source: (84) 4000K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31688.9 lumens
Efficiency: N/A
Efficacy: 103.4 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



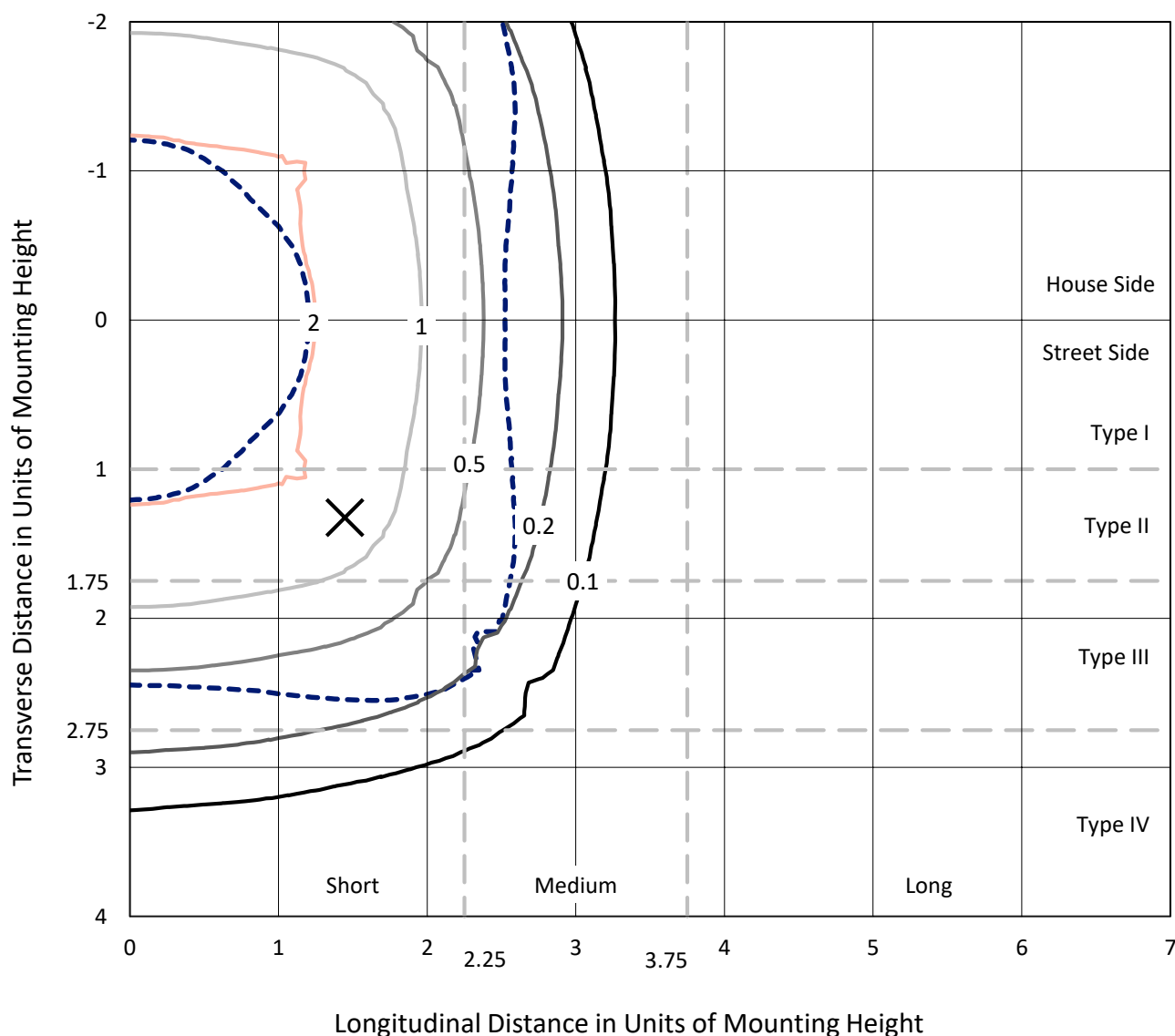
REPORT NUMBER: P157425

CATALOG NUMBER: VST-F12-LED-E-U-5MQ

Iso-Footcandle Lines of Horizontal Illumination

× Max cd

--- 1/2 Max cd

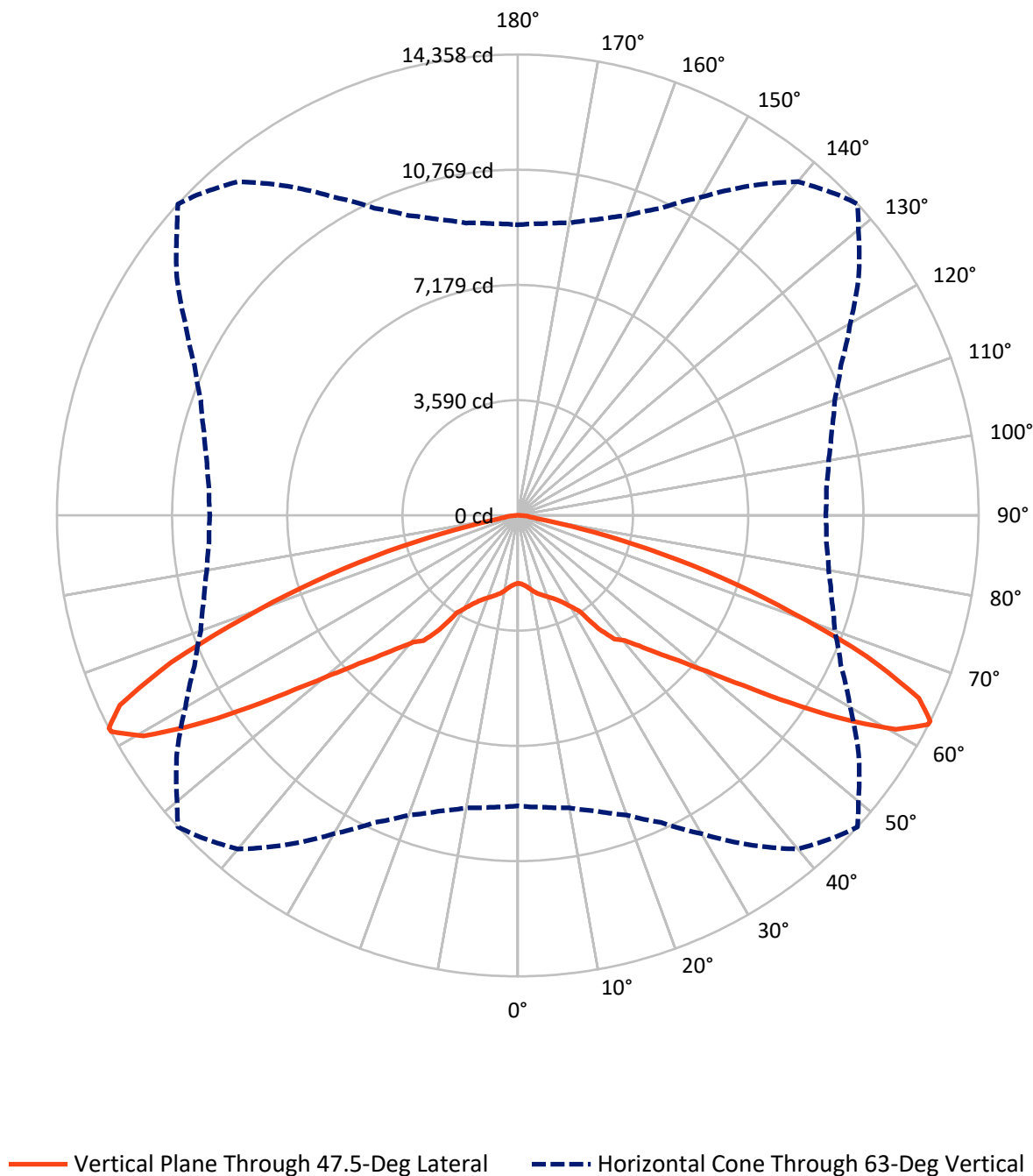


Based on 30 foot mounting height. Maximum calculated value = 2.6 fc
 Type V - Short - Full Cutoff

REPORT NUMBER: P157425

CATALOG NUMBER: VST-F12-LED-E-U-5MQ

Luminous Intensity Polar Plot



REPORT NUMBER: P157425

CATALOG NUMBER: VST-F12-LED-E-U-5MQ

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	15844.4	0.0	15844.4
	% Fixture	50.0	0.0	50.0
Street Side	Lumens	15844.4	0.0	15844.4
	% Fixture	50.0	0.0	50.0
Total	Lumens	31688.9	0.0	31688.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	212.4	0.7
10°-20°	722.1	2.3
20°-30°	1381.3	4.4
30°-40°	2642.2	8.3
40°-50°	4572.0	14.4
50°-60°	8211.0	25.9
60°-70°	9984.7	31.5
70°-80°	3606.0	11.4
80°-90°	357.1	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°	31688.9	100.0
0°-180°	31688.9	100.0

Coefficient of Utilization



REPORT NUMBER: P157425

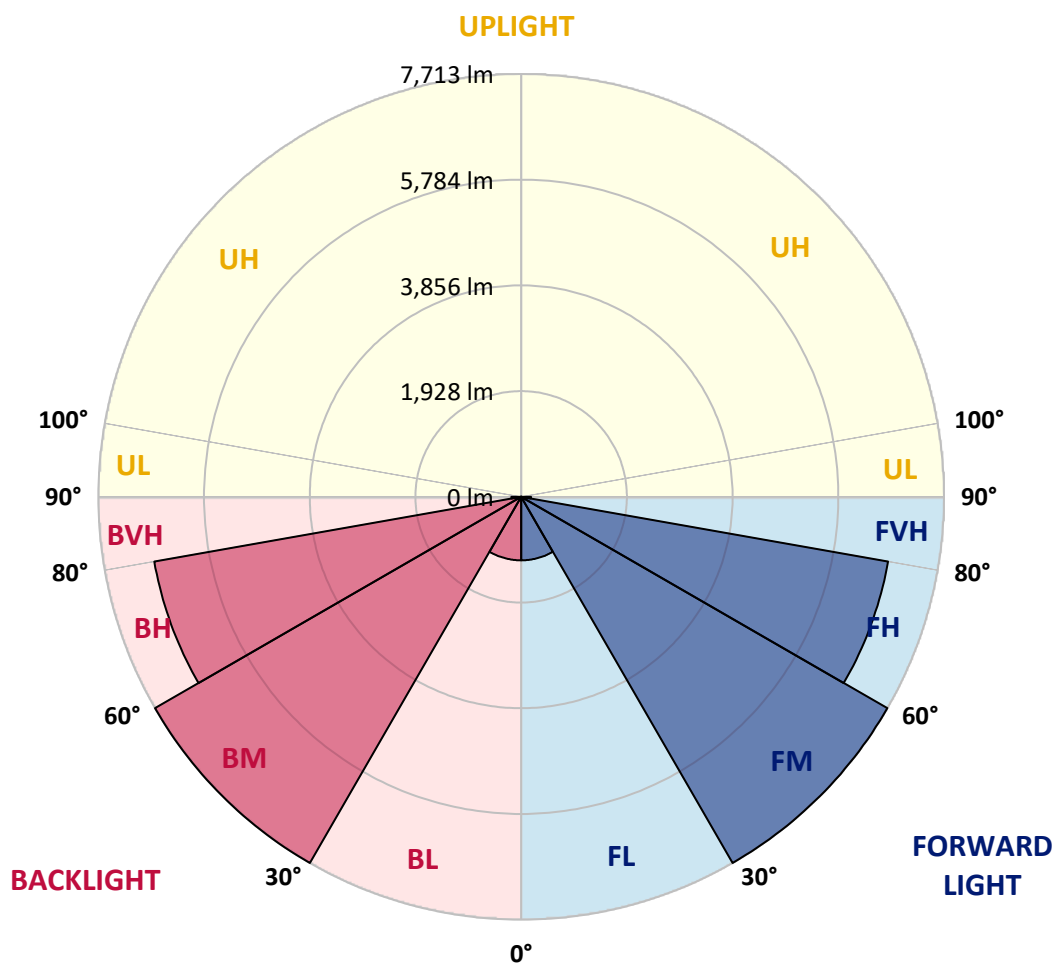
CATALOG NUMBER: VST-F12-LED-E-U-5MQ

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1157.9	3.7			
FM	(30°-60°)	7712.6	24.3			
FH	(60°-80°)	6795.3	21.4			G3/7500
FVH	(80°-90°)	178.6	0.6			G2/225
BL	(0°-30°)	1157.9	3.7	B3/2500		
BM	(30°-60°)	7712.6	24.3	B4/8500		
BH	(60°-80°)	6795.3	21.4	B5		G3/7500
BVH	(80°-90°)	178.6	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: P157425

CATALOG NUMBER: VST-F12-LED-E-U-5MQ

CANDELA DISTRIBUTION (FULL):

	0°	5°	10°	15°	20°	25°	30°	35°	40°	45°	47.5°
0°	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0
2.5°	2129.9	2125.9	2127.9	2129.9	2127.9	2125.9	2125.9	2125.9	2129.9	2125.9	2135.8
5°	2171.5	2167.5	2169.5	2169.5	2169.5	2165.5	2165.5	2165.5	2163.5	2165.5	2187.3
7.5°	2250.7	2244.8	2242.8	2246.7	2242.8	2240.8	2238.8	2238.8	2234.9	2234.9	2262.6
10°	2345.8	2337.9	2341.8	2343.8	2337.9	2333.9	2333.9	2333.9	2328.0	2326.0	2361.7
12.5°	2450.8	2446.9	2446.9	2442.9	2440.9	2436.9	2435.0	2436.9	2429.0	2429.0	2464.7
15°	2551.9	2543.9	2545.9	2540.0	2536.0	2532.1	2530.1	2528.1	2524.1	2524.1	2545.9
17.5°	2645.0	2639.0	2637.1	2631.1	2625.2	2619.2	2615.3	2613.3	2607.3	2607.3	2627.2
20°	2742.1	2736.1	2732.2	2722.3	2712.3	2706.4	2698.5	2694.5	2686.6	2688.6	2710.4
22.5°	2853.0	2843.1	2835.2	2827.3	2809.4	2797.5	2787.6	2779.7	2775.7	2775.7	2805.5
25°	3001.6	2995.7	2983.8	2958.0	2936.2	2918.4	2902.5	2894.6	2886.7	2882.7	2928.3
27.5°	3183.9	3177.9	3162.1	3136.3	3106.6	3076.9	3059.1	3045.2	3035.3	3029.3	3094.7
30°	3425.6	3415.7	3401.8	3360.2	3334.5	3288.9	3269.1	3249.3	3227.5	3233.4	3310.7
32.5°	3899.1	3885.3	3841.7	3796.1	3716.8	3655.4	3592.0	3544.5	3498.9	3493.0	3576.2
35°	4329.1	4323.1	4315.2	4283.5	4253.8	4216.1	4186.4	4136.9	4095.3	4085.4	4319.1
37.5°	4560.9	4574.7	4562.8	4558.9	4558.9	4576.7	4632.2	4687.7	4727.3	4751.1	4881.8
40°	4915.5	4915.5	4901.6	4893.7	4877.9	4901.6	4925.4	4967.0	4984.8	4986.8	5119.6
42.5°	5317.7	5319.7	5305.8	5282.0	5274.1	5295.9	5327.6	5367.2	5391.0	5397.0	5551.5
45°	5765.5	5759.5	5747.6	5739.7	5745.7	5765.5	5803.1	5880.4	5916.0	5943.8	6112.2
47.5°	6250.9	6290.5	6256.8	6262.8	6262.8	6324.2	6409.4	6472.8	6530.2	6583.7	6762.0
50°	6886.9	6892.8	6898.7	6916.6	6928.5	7009.7	7116.7	7192.0	7275.2	7344.5	7635.8
52.5°	7736.8	7724.9	7754.7	7774.5	7841.8	7885.4	8063.7	8158.8	8273.7	8362.9	8788.9
55°	8753.2	8747.3	8790.8	8806.7	8895.9	9002.8	9201.0	9409.0	9605.1	9714.1	10296.6
57.5°	9482.3	9498.2	9573.4	9678.5	9852.8	10080.6	10375.9	10835.5	11208.0	11326.9	11968.8
60°	9642.8	9694.3	9807.2	10017.2	10316.4	10740.4	11320.9	12024.3	12705.8	12933.7	13536.0
62.5°	9193.0	9252.5	9418.9	9670.5	10060.8	10688.9	11527.0	12519.6	13532.0	14039.2	14342.3
63°	9050.4	9123.7	9248.5	9539.8	9936.0	10556.2	11447.7	12517.6	13567.7	14120.4	14358.2
65°	8380.7	8394.6	8580.8	8872.1	9317.9	9961.8	10861.3	12097.6	13262.6	13900.5	13736.1
67.5°	7211.8	7269.2	7425.8	7719.0	8152.9	8822.5	9799.3	10942.5	11966.8	12476.0	11740.9
70°	5826.9	5822.9	6017.1	6252.9	6635.2	7223.7	8079.6	9111.8	9924.1	10294.6	9064.3
72.5°	4162.6	4059.6	4202.3	4463.8	4776.8	5246.4	5924.0	6726.4	7453.5	7774.5	6627.3
75°	1896.1	1868.3	1995.1	2254.7	2571.7	2989.7	3546.5	4239.9	4937.3	5313.7	4222.1
77.5°	638.0	645.9	695.4	788.5	958.9	1168.9	1515.7	1959.5	2524.1	2896.6	1981.3
80°	428.0	439.8	455.7	469.6	489.4	521.1	596.4	711.3	885.6	1071.9	626.1
82.5°	350.7	364.6	400.2	416.1	428.0	437.9	443.8	451.7	451.7	455.7	396.3
85°	251.6	275.4	322.9	352.7	364.6	372.5	382.4	394.3	376.4	360.6	307.1
87.5°	87.2	118.9	174.4	192.2	206.1	208.0	221.9	245.7	233.8	190.2	93.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P157425

CATALOG NUMBER: VST-F12-LED-E-U-5MQ

CANDELA DISTRIBUTION (continued):

	50°	55°	60°	65°	70°	75°	80°	85°	90°
0°	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0	2116.0
2.5°	2125.9	2123.9	2125.9	2127.9	2127.9	2127.9	2129.9	2131.8	2131.8
5°	2165.5	2167.5	2165.5	2167.5	2167.5	2169.5	2169.5	2173.4	2173.4
7.5°	2232.9	2236.8	2234.9	2238.8	2238.8	2242.8	2240.8	2246.7	2246.7
10°	2324.0	2328.0	2331.9	2333.9	2331.9	2335.9	2339.9	2341.8	2339.9
12.5°	2427.0	2429.0	2427.0	2431.0	2431.0	2435.0	2435.0	2440.9	2440.9
15°	2522.1	2520.2	2518.2	2524.1	2528.1	2530.1	2534.0	2540.0	2534.0
17.5°	2607.3	2609.3	2605.4	2611.3	2619.2	2625.2	2629.1	2637.1	2635.1
20°	2692.5	2688.6	2692.5	2702.4	2710.4	2718.3	2726.2	2738.1	2736.1
22.5°	2775.7	2779.7	2789.6	2797.5	2811.4	2823.3	2833.2	2849.1	2855.0
25°	2892.6	2892.6	2908.5	2918.4	2938.2	2954.1	2975.9	2993.7	3003.6
27.5°	3041.2	3041.2	3059.1	3080.9	3110.6	3138.3	3162.1	3185.9	3181.9
30°	3243.3	3253.2	3269.1	3296.8	3336.4	3370.1	3401.8	3425.6	3427.6
32.5°	3508.8	3520.7	3568.2	3639.6	3722.8	3786.2	3833.7	3891.2	3899.1
35°	4111.1	4140.8	4202.3	4259.7	4293.4	4331.0	4354.8	4356.8	4360.8
37.5°	4745.1	4693.6	4646.1	4602.5	4582.7	4578.7	4578.7	4586.6	4590.6
40°	4976.9	4951.2	4929.4	4901.6	4909.6	4907.6	4921.4	4933.3	4941.3
42.5°	5373.2	5353.4	5333.6	5297.9	5317.7	5311.8	5331.6	5349.4	5359.3
45°	5925.9	5864.5	5820.9	5763.5	5783.3	5771.4	5771.4	5793.2	5797.2
47.5°	6536.2	6464.9	6375.7	6304.4	6280.6	6258.8	6278.6	6278.6	6256.8
50°	7267.3	7182.1	7077.1	6962.1	6922.5	6900.7	6908.7	6918.6	6857.1
52.5°	8259.9	8164.8	8016.2	7841.8	7804.2	7786.4	7782.4	7768.5	7752.7
55°	9605.1	9426.8	9244.6	9014.7	8945.4	8925.6	8927.6	8911.7	8949.4
57.5°	11192.1	10930.6	10510.6	10231.2	10064.8	10001.4	9943.9	9920.2	9922.1
60°	12763.3	12230.3	11602.3	11114.9	10766.2	10544.3	10369.9	10272.8	10245.1
62.5°	13775.7	12937.6	11994.5	11204.0	10631.4	10264.9	9989.5	9815.2	9759.7
63°	13854.9	12967.3	11958.9	11110.9	10508.6	10124.2	9835.0	9654.7	9595.2
65°	13682.6	12668.2	11493.3	10482.8	9823.1	9397.1	9084.1	8913.7	8868.1
67.5°	12343.2	11499.2	10302.6	9258.4	8592.7	8160.8	7802.2	7639.7	7588.2
70°	10041.0	9462.5	8481.8	7590.2	6970.1	6554.0	6191.4	6056.7	6054.7
72.5°	7443.6	6692.7	6108.2	5454.4	4913.5	4582.7	4267.6	4117.1	4041.8
75°	4923.4	4119.0	3465.2	2914.4	2375.5	2078.3	1723.7	1571.1	1482.0
77.5°	2480.5	1838.6	1317.5	913.4	709.3	582.5	533.0	507.2	505.2
80°	826.2	620.1	533.0	499.3	489.4	491.4	485.4	475.5	463.6
82.5°	457.7	481.4	485.4	471.5	471.5	463.6	455.7	418.0	398.2
85°	392.3	431.9	435.9	428.0	426.0	414.1	400.2	348.7	319.0
87.5°	245.7	283.3	277.4	247.7	273.4	255.6	241.7	156.5	114.9
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)