

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: P510128

Luminaire Tested: **VERD-M-CA4-210-730-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510128
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-7)
Test Lab: INNOVATION CENTER
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-M-CA4-210-730-U-T4-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 3000K, 960mA LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 26590 lumens
Efficiency: N/A
Efficacy: 124.5 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

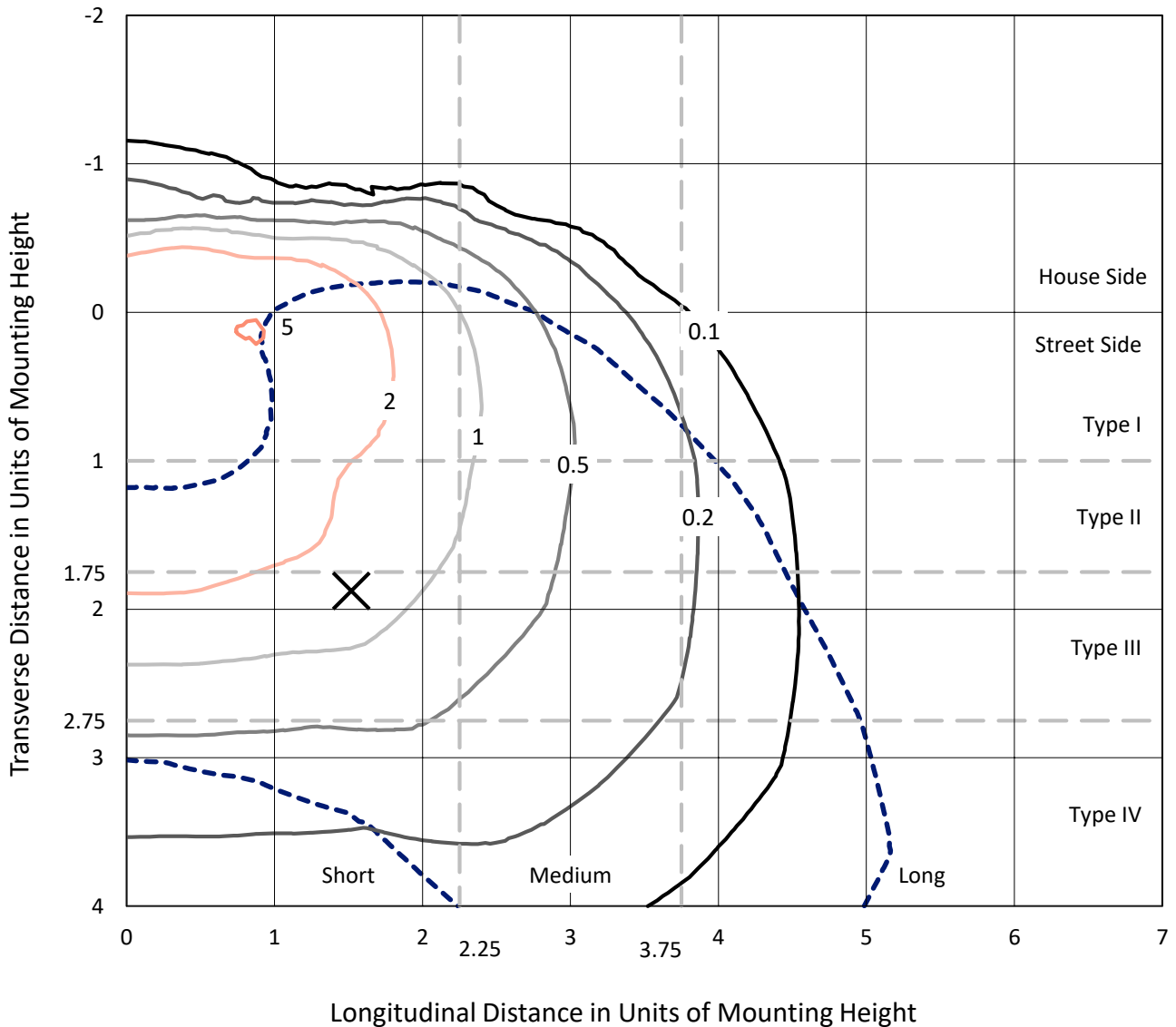
Input Watts (W): 213.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

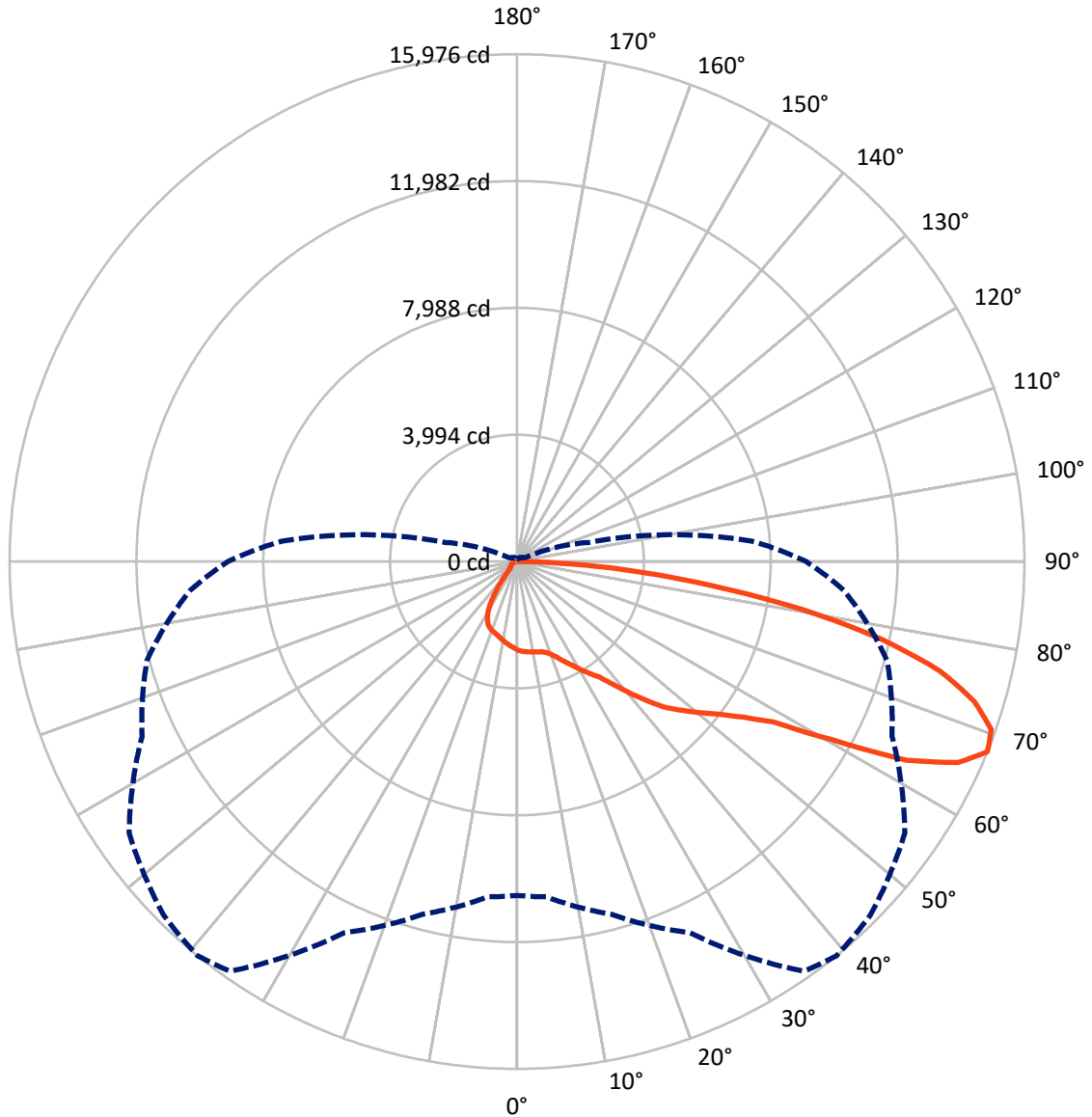
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.1 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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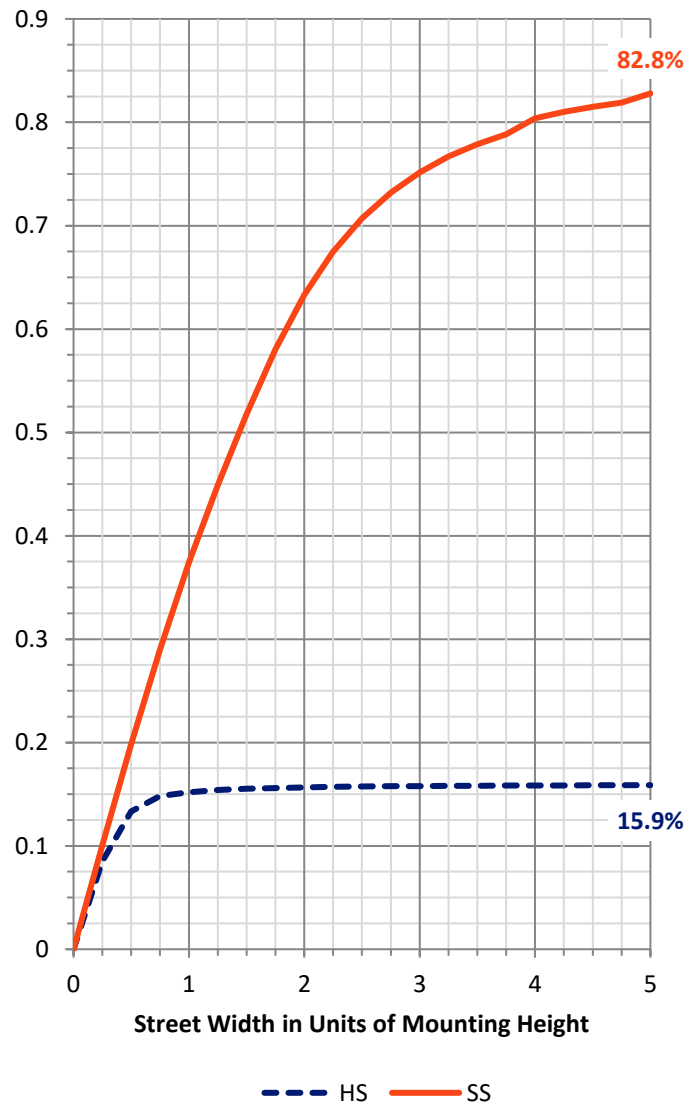
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4269.7	0.0	4269.7
	% Fixture	16.1	0.0	16.1
Street Side	Lumens	22320.3	0.0	22320.3
	% Fixture	83.9	0.0	83.9
Total	Lumens	26590.0	0.0	26590.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	262.9	1.0
10°-20°	782.3	2.9
20°-30°	1386.0	5.2
30°-40°	2220.0	8.3
40°-50°	3561.3	13.4
50°-60°	5205.6	19.6
60°-70°	6936.7	26.1
70°-80°	5205.4	19.6
80°-90°	1029.9	3.9
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°	26590.0	100.0
0°-180°	26590.0	100.0



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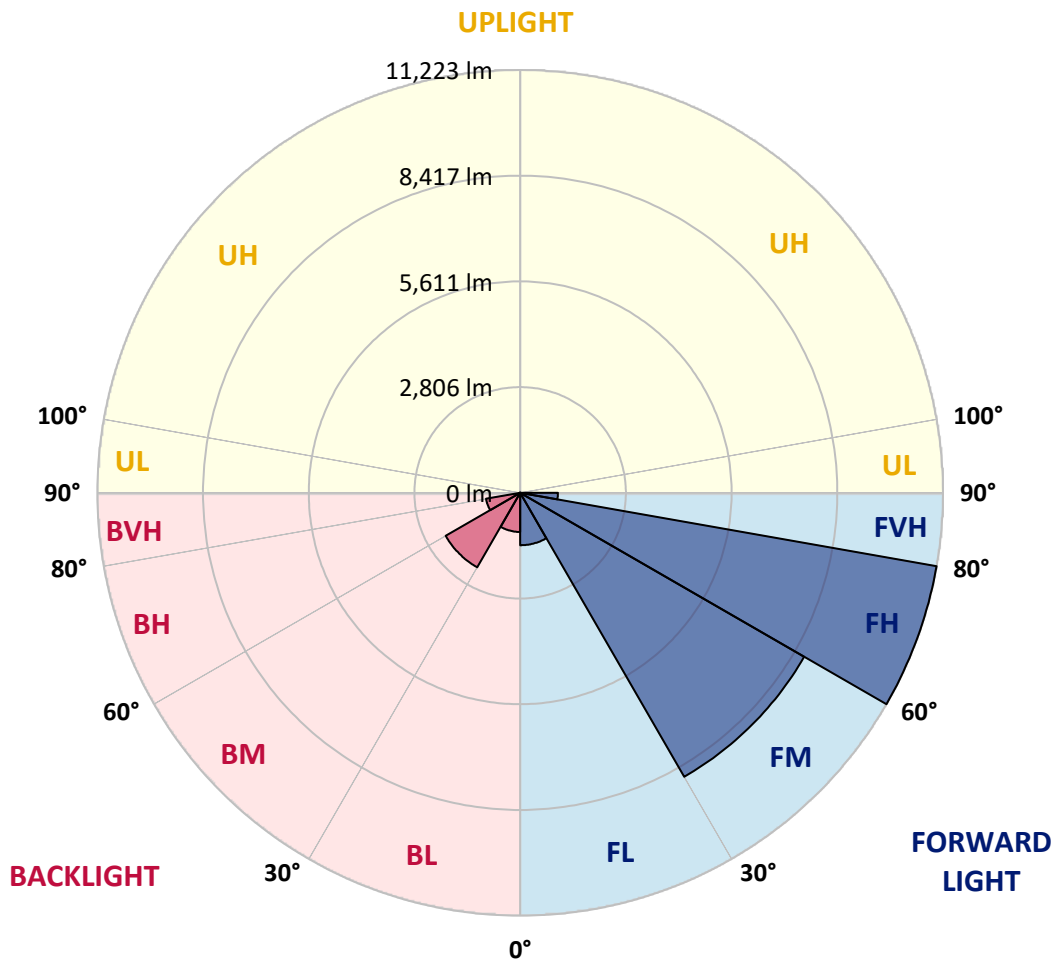
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1391.5	5.2			
FM	(30°-60°)	8703.1	32.7			
FH	(60°-80°)	11222.8	42.2			G4/12000
FVH	(80°-90°)	1002.9	3.8			G5
BL	(0°-30°)	1039.7	3.9	B3/2500		
BM	(30°-60°)	2283.7	8.6	B2/2500		
BH	(60°-80°)	919.3	3.5	B2/1000		G2/1000
BVH	(80°-90°)	27.0	0.1			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°	39°	45°	55°	65°	75°	85°
0°	2784.3	2784.3	2784.3	2784.3	2784.3	2784.3	2784.3	2784.3	2784.3	2784.3	2784.3
2.5°	2786.9	2824.3	2824.3	2813.6	2820.3	2825.7	2785.6	2796.3	2792.3	2790.9	2799.0
5°	2808.3	2849.7	2847.0	2833.7	2839.0	2849.7	2812.3	2828.3	2823.0	2809.6	2812.3
7.5°	2808.3	2843.0	2851.1	2836.4	2861.7	2875.1	2835.0	2849.7	2856.4	2847.0	2837.7
10°	2797.6	2828.3	2839.0	2836.4	2869.8	2891.1	2852.4	2893.8	2899.2	2899.2	2884.5
12.5°	2793.6	2828.3	2843.0	2855.1	2893.8	2916.5	2893.8	2933.9	2960.6	2959.3	2949.9
15°	2796.3	2835.0	2857.7	2877.8	2919.2	2947.3	2937.9	2999.4	3031.4	3040.8	3040.8
17.5°	2863.1	2909.8	2920.5	2941.9	2970.0	3012.7	3000.7	3079.5	3130.3	3146.3	3169.0
20°	3050.1	3086.2	3099.6	3088.9	3100.9	3127.6	3103.6	3179.7	3255.9	3298.6	3336.0
22.5°	3289.3	3316.0	3304.0	3293.3	3286.6	3293.3	3263.9	3314.7	3400.2	3461.6	3525.7
25°	3471.0	3529.8	3520.4	3491.0	3481.7	3489.7	3452.3	3515.1	3593.9	3658.0	3754.2
27.5°	3691.4	3727.5	3702.1	3691.4	3698.1	3696.8	3674.0	3734.2	3806.3	3886.5	4028.1
30°	3930.6	3961.3	3935.9	3925.2	3937.2	3945.3	3919.9	4025.4	4101.6	4188.4	4371.4
32.5°	4323.3	4396.8	4327.4	4188.4	4191.1	4203.1	4205.8	4347.4	4486.3	4554.5	4796.3
35°	4883.1	4941.9	4849.7	4681.4	4471.6	4463.6	4485.0	4696.1	4975.3	5285.3	5568.5
37.5°	5405.5	5491.0	5408.2	5211.8	4956.6	4895.2	4784.3	5035.4	5475.0	6141.7	6494.4
40°	6032.1	6096.2	5931.9	5760.9	5505.7	5418.9	5241.2	5401.5	6004.1	7035.5	7278.6
42.5°	6535.8	6574.5	6438.3	6259.2	6037.5	5972.0	5789.0	5803.7	6569.2	7818.4	7974.7
45°	7002.1	7043.5	6931.2	6778.9	6638.7	6559.8	6426.2	6498.4	7231.9	8644.0	8549.2
47.5°	7356.1	7397.5	7308.0	7199.8	7054.2	7000.7	7003.4	7262.6	8042.8	9304.0	9064.9
50°	7935.9	7919.9	7686.1	7568.5	7455.0	7483.0	7512.4	7881.2	8860.5	9870.5	9541.8
52.5°	8947.3	8868.5	8386.2	8078.9	7938.6	7986.7	8034.8	8525.1	9789.0	10387.5	9907.9
55°	10090.9	10010.8	9600.6	8943.3	8571.9	8649.4	8607.9	9162.4	10569.2	10884.5	10209.8
57.5°	10940.6	11072.9	10916.6	10558.5	9628.7	9527.1	9434.9	9806.4	11199.8	11381.5	10499.7
60°	11679.4	11863.8	12143.0	12045.5	11650.1	11385.5	10539.8	10558.5	11806.4	11726.2	10614.6
62.5°	12400.9	12509.1	12987.4	13093.0	13583.3	13773.0	12913.9	11531.2	12392.9	11965.4	10692.1
65°	11679.4	11818.4	12650.7	13418.9	15003.5	15257.3	14955.4	13292.0	12824.4	12107.0	10602.6
67.5°	10513.1	10597.3	11496.4	12893.9	15746.3	15976.1	15740.9	14908.6	13026.2	12064.2	10324.7
70°	8988.7	9121.0	10004.1	11877.2	15719.6	15842.5	15638.1	15103.7	12950.0	11818.4	9623.3
72.5°	7433.6	7508.4	8256.6	10125.7	14951.4	15054.2	14946.0	14804.4	12693.5	11133.0	8275.3
75°	5587.2	5603.3	6370.1	7996.1	13219.9	13757.0	13889.2	14288.7	11711.5	9543.2	6120.3
77.5°	3746.2	3905.2	4641.3	6110.9	10852.5	11711.5	12338.1	12629.4	9785.0	7122.3	3254.5
80°	2010.7	2050.8	2844.4	4336.7	8247.2	9068.9	9663.4	9668.7	6843.1	3528.4	726.8
82.5°	931.2	892.5	1432.2	2744.2	5712.8	6078.9	6477.0	5425.6	2740.2	602.5	185.7
85°	412.8	435.5	648.0	1337.4	3170.4	3537.8	3487.0	2402.2	481.0	163.0	113.6
87.5°	153.6	161.7	251.2	539.8	1131.6	1234.5	1110.2	462.3	62.8	57.4	34.7
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°	2784.3	2784.3	2784.3	2784.3	2784.3	2784.3	2784.3	2784.3	2784.3	2784.3	2784.3
2.5°	2789.6	2789.6	2786.9	2750.9	2742.8	2725.5	2710.8	2721.5	2709.4	2717.5	2709.4
5°	2801.6	2794.9	2778.9	2736.2	2716.1	2677.4	2648.0	2654.7	2638.6	2638.6	2637.3
7.5°	2829.7	2816.3	2788.3	2720.1	2682.7	2626.6	2581.2	2566.5	2550.5	2531.7	2529.1
10°	2875.1	2856.4	2819.0	2725.5	2653.3	2578.5	2499.7	2469.0	2428.9	2399.5	2394.1
12.5°	2937.9	2909.8	2859.1	2745.5	2650.7	2531.7	2426.2	2366.1	2318.0	2275.2	2265.9
15°	3028.7	3000.7	2940.6	2785.6	2652.0	2487.7	2348.7	2248.5	2165.7	2125.6	2126.9
17.5°	3161.0	3141.0	3048.8	2869.8	2677.4	2464.9	2284.6	2125.6	1997.3	1930.5	1921.2
20°	3330.7	3317.3	3205.1	2980.7	2736.2	2469.0	2215.1	1994.7	1806.3	1660.7	1628.6
22.5°	3528.4	3508.4	3370.8	3076.8	2781.6	2458.3	2139.0	1850.4	1567.1	1377.4	1340.0
25°	3748.9	3738.2	3523.1	3161.0	2786.9	2412.8	2029.4	1663.3	1308.0	1104.9	1072.8
27.5°	4030.8	3968.0	3660.7	3206.4	2774.9	2323.3	1873.1	1406.8	1039.4	899.1	864.4
30°	4339.4	4212.5	3794.3	3241.2	2716.1	2180.4	1650.0	1110.2	773.6	649.3	631.9
32.5°	4681.4	4491.7	3919.9	3238.5	2611.9	1959.9	1360.1	770.9	522.4	471.6	454.2
35°	5300.0	4978.0	4070.8	3194.4	2436.9	1698.1	960.6	502.3	387.4	356.7	352.7
37.5°	6159.0	5612.6	4273.9	3110.2	2211.1	1393.5	626.6	343.4	331.3	332.7	331.3
40°	6863.1	6320.7	4555.8	2983.3	1926.5	995.3	375.4	305.9	312.6	316.6	318.0
42.5°	7552.5	6897.8	4904.5	2824.3	1628.6	646.6	304.6	292.6	287.2	293.9	296.6
45°	8106.9	7401.5	5233.2	2638.6	1279.9	382.1	295.3	271.2	261.9	264.5	268.5
47.5°	8550.5	7802.3	5430.9	2422.2	935.2	288.6	287.2	252.5	239.1	236.5	235.1
50°	8968.7	8145.7	5557.8	2160.3	595.9	277.9	265.9	231.1	215.1	212.4	212.4
52.5°	9253.2	8370.1	5600.6	1850.4	355.4	271.2	251.2	213.8	192.4	196.4	199.1
55°	9531.1	8597.3	5512.4	1446.9	272.5	253.8	235.1	192.4	175.0	191.1	196.4
57.5°	9663.4	8630.7	5313.3	1006.0	264.5	229.8	212.4	172.3	159.0	168.3	168.3
60°	9770.3	8607.9	5035.4	637.3	257.9	213.8	193.7	156.3	140.3	134.9	130.9
62.5°	9699.5	8517.1	4477.0	415.5	239.1	195.1	176.4	144.3	121.6	106.9	105.5
65°	9548.5	8196.5	3573.8	327.3	221.8	185.7	160.3	129.6	106.9	89.5	88.2
67.5°	9103.6	7416.2	2312.6	271.2	212.4	179.0	148.3	120.2	94.9	77.5	76.2
70°	8037.5	5990.7	709.4	243.2	220.4	172.3	145.6	109.6	84.2	68.1	65.5
72.5°	6355.4	4002.7	263.2	201.7	189.7	165.7	141.6	98.9	72.1	57.4	54.8
75°	4093.6	1308.0	223.1	156.3	161.7	157.6	130.9	90.8	61.5	46.8	45.4
77.5°	1159.7	273.9	203.1	114.9	143.0	152.3	114.9	76.2	54.8	40.1	38.7
80°	243.2	195.1	185.7	81.5	106.9	98.9	77.5	58.8	52.1	34.7	34.7
82.5°	159.0	155.0	159.0	56.1	70.8	72.1	61.5	50.8	45.4	32.1	32.1
85°	112.2	141.6	76.2	40.1	33.4	30.7	36.1	44.1	40.1	26.7	26.7
87.5°	38.7	22.7	16.0	16.0	14.7	14.7	17.4	20.0	21.4	21.4	20.0
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)