

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: P510200

Luminaire Tested: **VERD-M-CA4-220-760-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510200
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-CA4-220-760-U-T4-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 5700K, 1000mA LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27967 lumens
Efficiency: N/A
Efficacy: 125.7 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

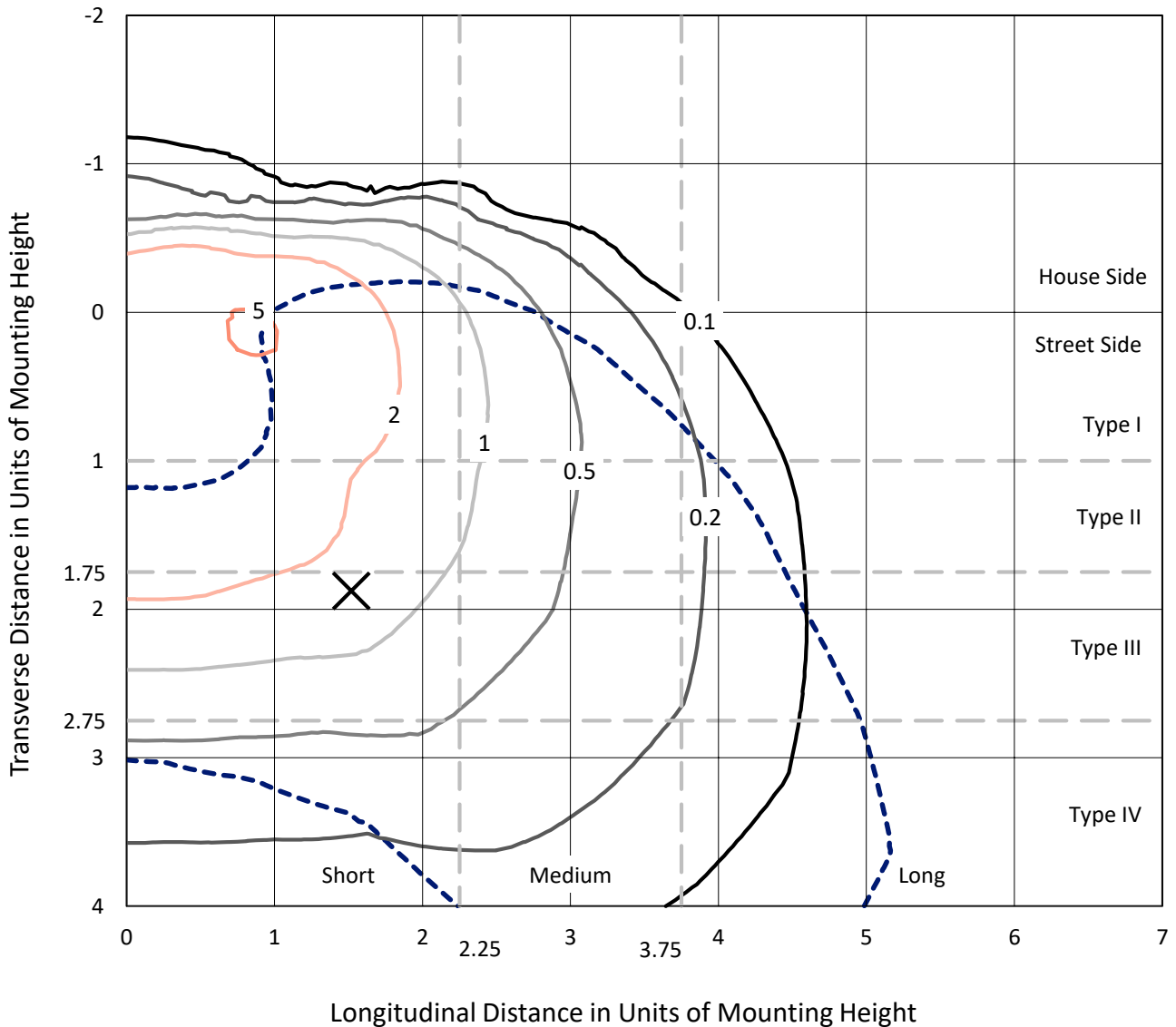
Input Watts (W): 222.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

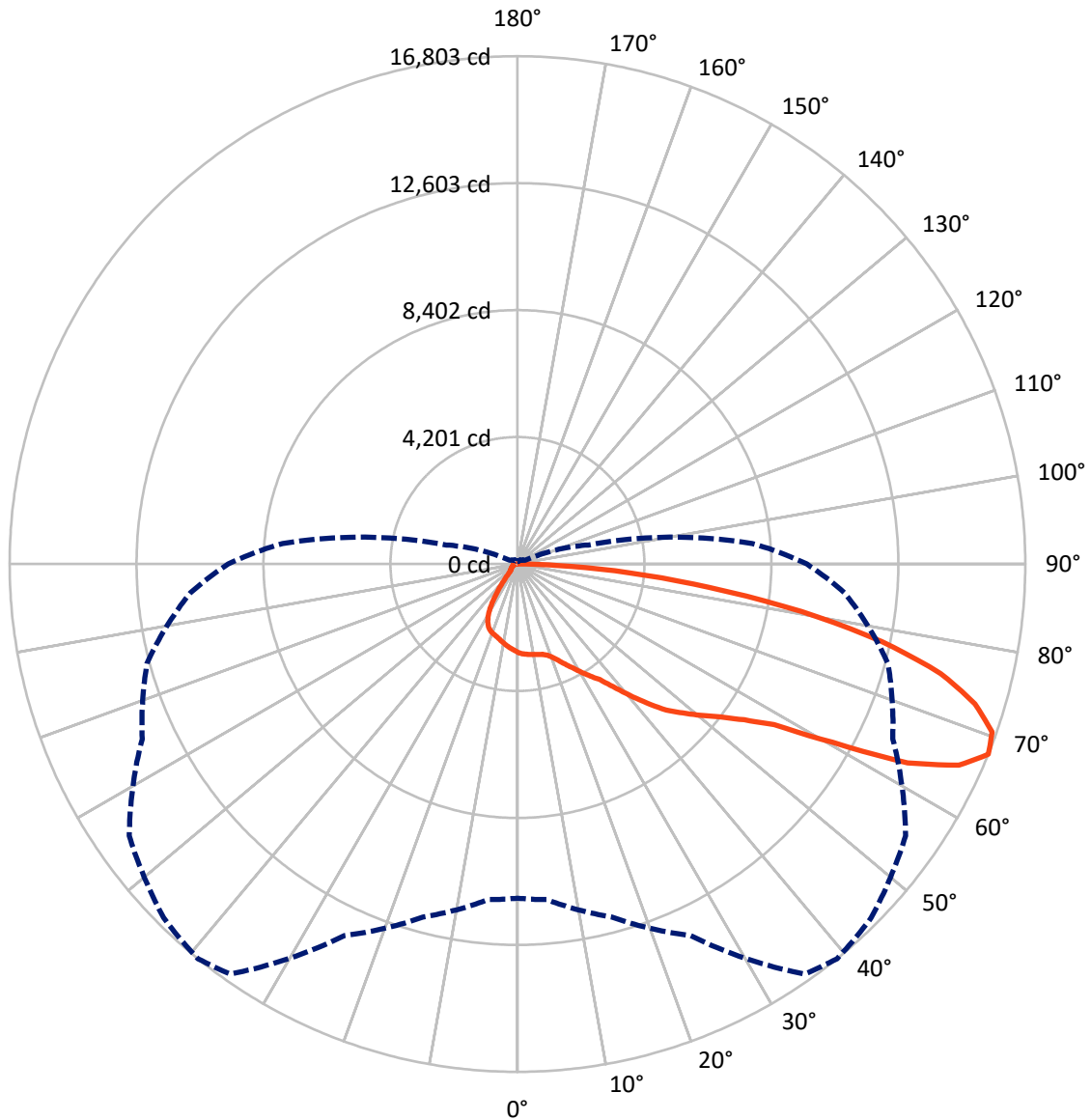
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.4 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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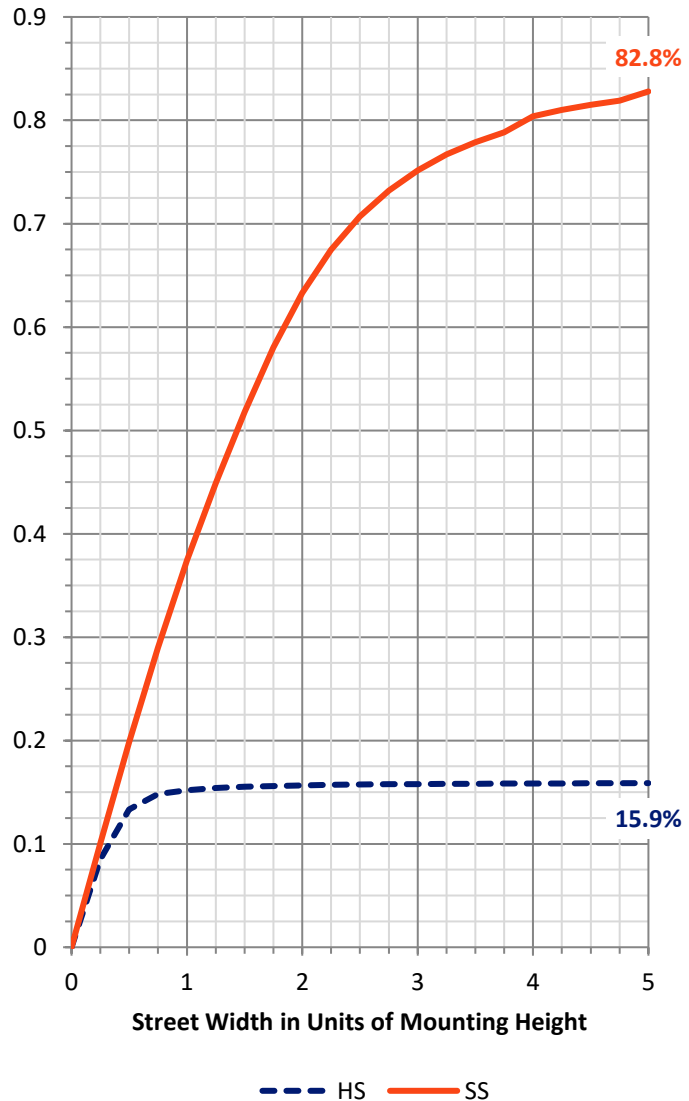
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4490.8	0.0	4490.8
	% Fixture	16.1	0.0	16.1
Street Side	Lumens	23476.2	0.0	23476.2
	% Fixture	83.9	0.0	83.9
Total	Lumens	27967.0	0.0	27967.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	276.5	1.0
10°-20°	822.8	2.9
20°-30°	1457.8	5.2
30°-40°	2334.9	8.3
40°-50°	3745.7	13.4
50°-60°	5475.1	19.6
60°-70°	7295.9	26.1
70°-80°	5475.0	19.6
80°-90°	1083.2	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°	27967.0	100.0
0°-180°	27967.0	100.0

Coefficient of Utilization



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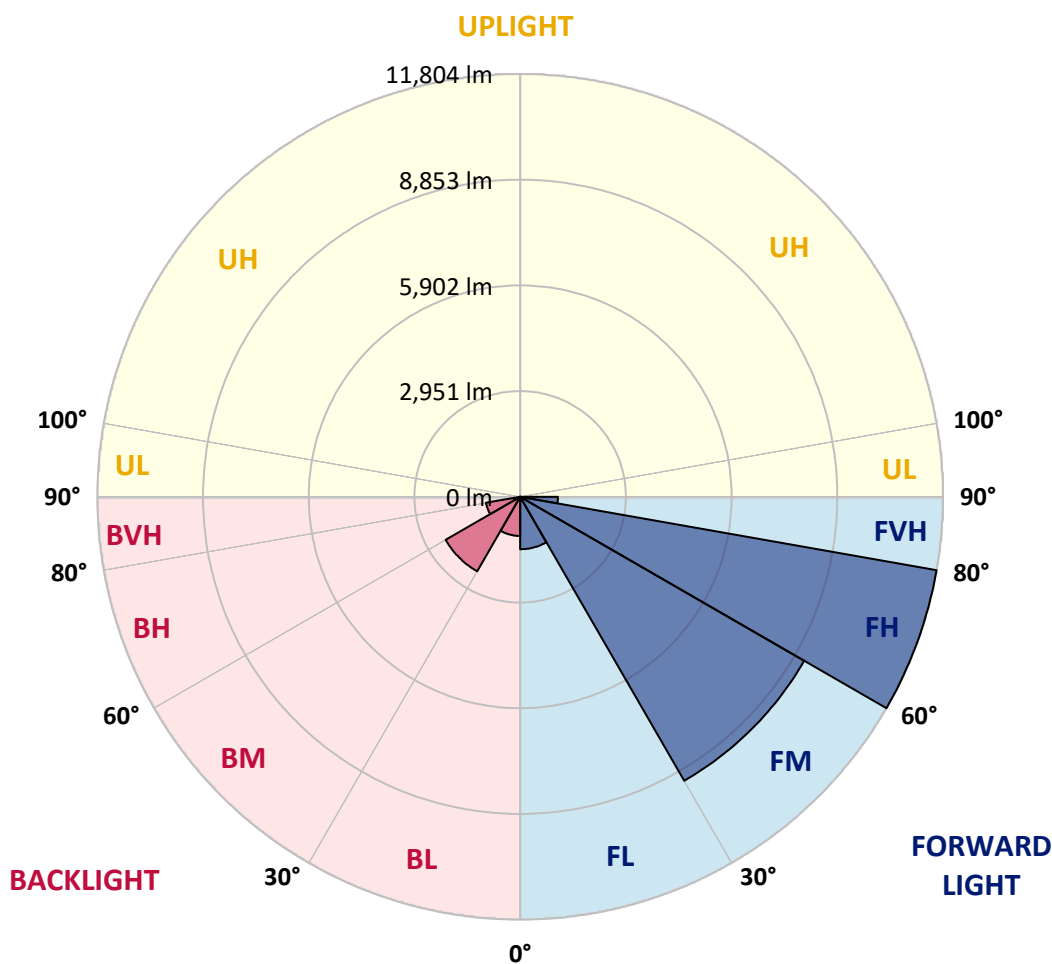
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1463.5	5.2			
FM (30°-60°)	9153.8	32.7			
FH (60°-80°)	11803.9	42.2			G4/12000
FVH (80°-90°)	1054.9	3.8			G5
BL (0°-30°)	1093.5	3.9	B3/2500		
BM (30°-60°)	2401.9	8.6	B2/2500		
BH (60°-80°)	966.9	3.5	B2/1000		G2/1000
BVH (80°-90°)	28.4	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°	2928.4	2928.4	2928.4	2928.4	2928.4	2928.4	2928.4	2928.4	2928.4	2928.4	2928.4
2.5°	2931.3	2970.6	2970.6	2959.4	2966.4	2972.0	2929.8	2941.1	2936.9	2935.5	2943.9
5°	2953.7	2997.3	2994.5	2980.4	2986.1	2997.3	2958.0	2974.8	2969.2	2955.1	2958.0
7.5°	2953.7	2990.3	2998.7	2983.2	3009.9	3024.0	2981.8	2997.3	3004.3	2994.5	2984.7
10°	2942.5	2974.8	2986.1	2983.2	3018.4	3040.9	3000.1	3043.7	3049.3	3049.3	3033.8
12.5°	2938.3	2974.8	2990.3	3002.9	3043.7	3067.6	3043.7	3085.8	3113.9	3112.5	3102.7
15°	2941.1	2981.8	3005.7	3026.8	3070.4	3099.9	3090.0	3154.7	3188.4	3198.2	3198.2
17.5°	3011.4	3060.5	3071.8	3094.3	3123.8	3168.7	3156.1	3239.0	3292.4	3309.3	3333.1
20°	3208.1	3246.0	3260.1	3248.8	3261.5	3289.6	3264.3	3344.4	3424.5	3469.4	3508.8
22.5°	3459.6	3487.7	3475.1	3463.8	3456.8	3463.8	3432.9	3486.3	3576.2	3640.9	3708.3
25°	3650.7	3712.5	3702.7	3671.8	3662.0	3670.4	3631.0	3697.1	3780.0	3847.4	3948.6
27.5°	3882.6	3920.5	3893.8	3882.6	3889.6	3888.2	3864.3	3927.5	4003.4	4087.7	4236.7
30°	4134.1	4166.4	4139.7	4128.5	4141.1	4149.6	4122.9	4233.9	4314.0	4405.3	4597.8
32.5°	4547.2	4624.5	4551.5	4405.3	4408.1	4420.8	4423.6	4572.5	4718.7	4790.3	5044.7
35°	5136.0	5197.8	5100.9	4923.8	4703.2	4694.8	4717.3	4939.3	5233.0	5559.0	5856.9
37.5°	5685.5	5775.4	5688.3	5481.7	5213.3	5148.7	5032.0	5296.2	5758.5	6459.7	6830.7
40°	6344.5	6411.9	6239.1	6059.2	5790.8	5699.5	5512.6	5681.2	6315.0	7399.8	7655.5
42.5°	6874.3	6915.0	6771.7	6583.4	6350.1	6281.3	6088.7	6104.2	6909.4	8223.2	8387.7
45°	7364.7	7408.2	7290.2	7130.0	6982.5	6899.5	6759.0	6834.9	7606.4	9091.7	8991.9
47.5°	7737.0	7780.6	7686.5	7572.6	7419.5	7363.3	7366.1	7638.7	8459.3	9785.8	9534.3
50°	8346.9	8330.0	8084.1	7960.5	7841.0	7870.5	7901.5	8289.3	9319.3	10381.6	10036.0
52.5°	9410.6	9327.7	8820.5	8497.3	8349.7	8400.3	8450.9	8966.6	10295.9	10925.5	10421.0
55°	10613.5	10529.2	10097.8	9406.4	9015.8	9097.3	9053.7	9636.9	11116.6	11448.2	10738.6
57.5°	11507.2	11646.3	11481.9	11105.3	10127.3	10020.5	9923.5	10314.2	11779.8	11970.9	11043.5
60°	12284.3	12478.2	12771.9	12669.3	12253.4	11975.1	11085.6	11105.3	12417.8	12333.5	11164.3
62.5°	13043.1	13156.9	13660.0	13771.0	14286.7	14486.2	13582.7	12128.3	13034.7	12585.0	11245.8
65°	12284.3	12430.4	13305.9	14113.9	15780.4	16047.4	15729.8	13980.4	13488.5	12734.0	11151.7
67.5°	11057.5	11146.1	12091.8	13561.6	16561.7	16803.4	16556.1	15680.7	13700.7	12689.0	10859.4
70°	9454.2	9593.3	10522.2	12492.3	16533.6	16662.9	16447.9	15885.8	13620.6	12430.4	10121.7
72.5°	7818.6	7897.2	8684.2	10650.0	15725.6	15833.8	15720.0	15571.1	13350.8	11709.6	8703.8
75°	5876.6	5893.4	6700.0	8410.1	13904.5	14469.4	14608.5	15028.6	12318.0	10037.4	6437.2
77.5°	3940.2	4107.4	4881.7	6427.4	11414.5	12318.0	12977.1	13283.4	10291.7	7491.1	3423.1
80°	2114.8	2157.0	2991.7	4561.3	8674.3	9538.5	10163.8	10169.5	7197.5	3711.1	764.4
82.5°	979.4	938.7	1506.4	2886.3	6008.6	6393.7	6812.4	5706.5	2882.1	633.7	195.3
85°	434.2	458.1	681.5	1406.6	3334.5	3721.0	3667.6	2526.6	505.9	171.4	119.4
87.5°	161.6	170.0	264.2	567.7	1190.2	1298.4	1167.7	486.2	66.0	60.4	36.5
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°	2928.4	2928.4	2928.4	2928.4	2928.4	2928.4	2928.4	2928.4	2928.4	2928.4	2928.4
2.5°	2934.1	2934.1	2931.3	2893.3	2884.9	2866.6	2851.2	2862.4	2849.8	2858.2	2849.8
5°	2946.7	2939.7	2922.8	2877.9	2856.8	2816.0	2785.1	2792.1	2775.3	2775.3	2773.9
7.5°	2976.2	2962.2	2932.7	2861.0	2821.6	2762.6	2714.9	2699.4	2682.5	2662.9	2660.0
10°	3024.0	3004.3	2965.0	2866.6	2790.7	2712.0	2629.1	2596.8	2554.7	2523.7	2518.1
12.5°	3090.0	3060.5	3007.1	2887.7	2787.9	2662.9	2551.8	2488.6	2438.0	2393.1	2383.2
15°	3185.6	3156.1	3092.9	2929.8	2789.3	2616.5	2470.3	2365.0	2277.8	2235.7	2237.1
17.5°	3324.7	3303.6	3206.7	3018.4	2816.0	2592.6	2402.9	2235.7	2100.8	2030.5	2020.7
20°	3503.2	3489.1	3371.1	3135.0	2877.9	2596.8	2329.8	2098.0	1899.8	1746.7	1712.9
22.5°	3711.1	3690.1	3545.3	3236.2	2925.6	2585.6	2249.7	1946.2	1648.3	1448.8	1409.4
25°	3943.0	3931.8	3705.5	3324.7	2931.3	2537.8	2134.5	1749.5	1375.7	1162.1	1128.4
27.5°	4239.5	4173.5	3850.3	3372.5	2918.6	2443.6	1970.1	1479.7	1093.2	945.7	909.2
30°	4564.1	4430.6	3990.8	3409.0	2856.8	2293.3	1735.4	1167.7	813.6	682.9	664.7
32.5°	4923.8	4724.3	4122.9	3406.2	2747.2	2061.4	1430.5	810.8	549.4	496.0	477.8
35°	5574.4	5235.8	4281.7	3359.8	2563.1	1786.0	1010.3	528.4	407.5	375.2	371.0
37.5°	6478.0	5903.3	4495.2	3271.3	2325.6	1465.6	659.0	361.1	348.5	349.9	348.5
40°	7218.5	6648.0	4791.7	3137.8	2026.3	1046.9	394.9	321.8	328.8	333.0	334.4
42.5°	7943.6	7255.1	5158.5	2970.6	1712.9	680.1	320.4	307.7	302.1	309.1	312.0
45°	8526.8	7784.8	5504.2	2775.3	1346.2	401.9	310.5	285.3	275.4	278.2	282.4
47.5°	8993.3	8206.4	5712.2	2547.6	983.6	303.5	302.1	265.6	251.5	248.7	247.3
50°	9433.1	8567.5	5845.6	2272.2	626.7	292.3	279.6	243.1	226.2	223.4	223.4
52.5°	9732.4	8803.6	5890.6	1946.2	373.8	285.3	264.2	224.8	202.3	206.6	209.4
55°	10024.7	9042.5	5797.9	1521.8	286.7	267.0	247.3	202.3	184.1	200.9	206.6
57.5°	10163.8	9077.6	5588.5	1058.1	278.2	241.7	223.4	181.3	167.2	177.1	177.1
60°	10276.3	9053.7	5296.2	670.3	271.2	224.8	203.8	164.4	147.5	141.9	137.7
62.5°	10201.8	8958.2	4708.8	437.0	251.5	205.2	185.5	151.8	127.9	112.4	111.0
65°	10043.0	8620.9	3758.9	344.3	233.3	195.3	168.6	136.3	112.4	94.1	92.7
67.5°	9575.1	7800.3	2432.4	285.3	223.4	188.3	156.0	126.5	99.8	81.5	80.1
70°	8453.7	6300.9	746.2	255.7	231.9	181.3	153.2	115.2	88.5	71.7	68.9
72.5°	6684.6	4210.0	276.8	212.2	199.5	174.2	149.0	104.0	75.9	60.4	57.6
75°	4305.5	1375.7	234.7	164.4	170.0	165.8	137.7	95.6	64.6	49.2	47.8
77.5°	1219.7	288.1	213.6	120.8	150.4	160.2	120.8	80.1	57.6	42.2	40.8
80°	255.7	205.2	195.3	85.7	112.4	104.0	81.5	61.8	54.8	36.5	36.5
82.5°	167.2	163.0	167.2	59.0	74.5	75.9	64.6	53.4	47.8	33.7	33.7
85°	118.0	149.0	80.1	42.2	35.1	32.3	37.9	46.4	42.2	28.1	28.1
87.5°	40.8	23.9	16.9	16.9	15.5	15.5	18.3	21.1	22.5	22.5	21.1
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)