

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: P510240

Luminaire Tested: **VERD-M-CA4-230-750-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510240
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-CA4-230-750-U-T4-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 5000K, 1050mA LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 29679 lumens
Efficiency: N/A
Efficacy: 127.2 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

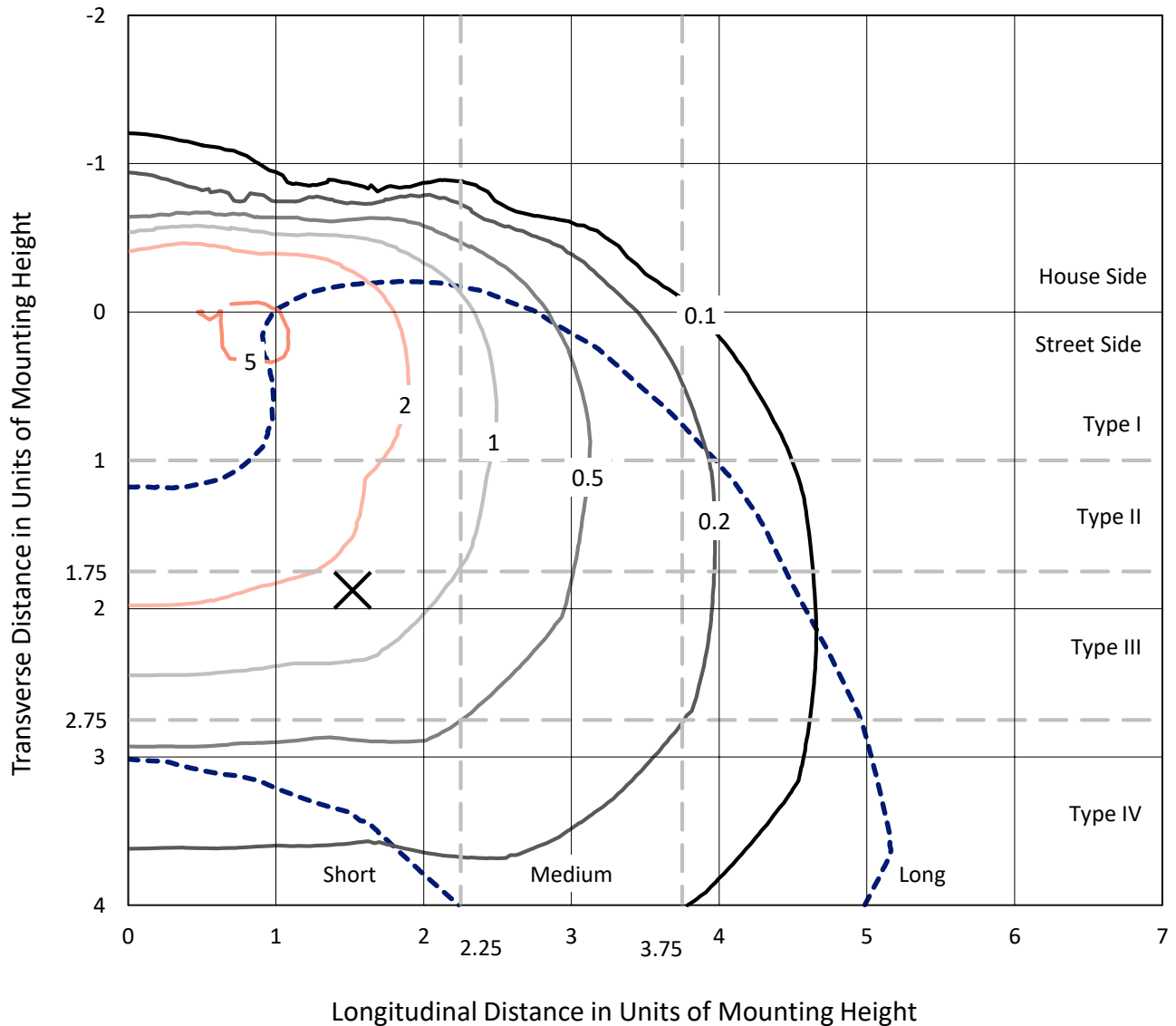
Input Watts (W): 233.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

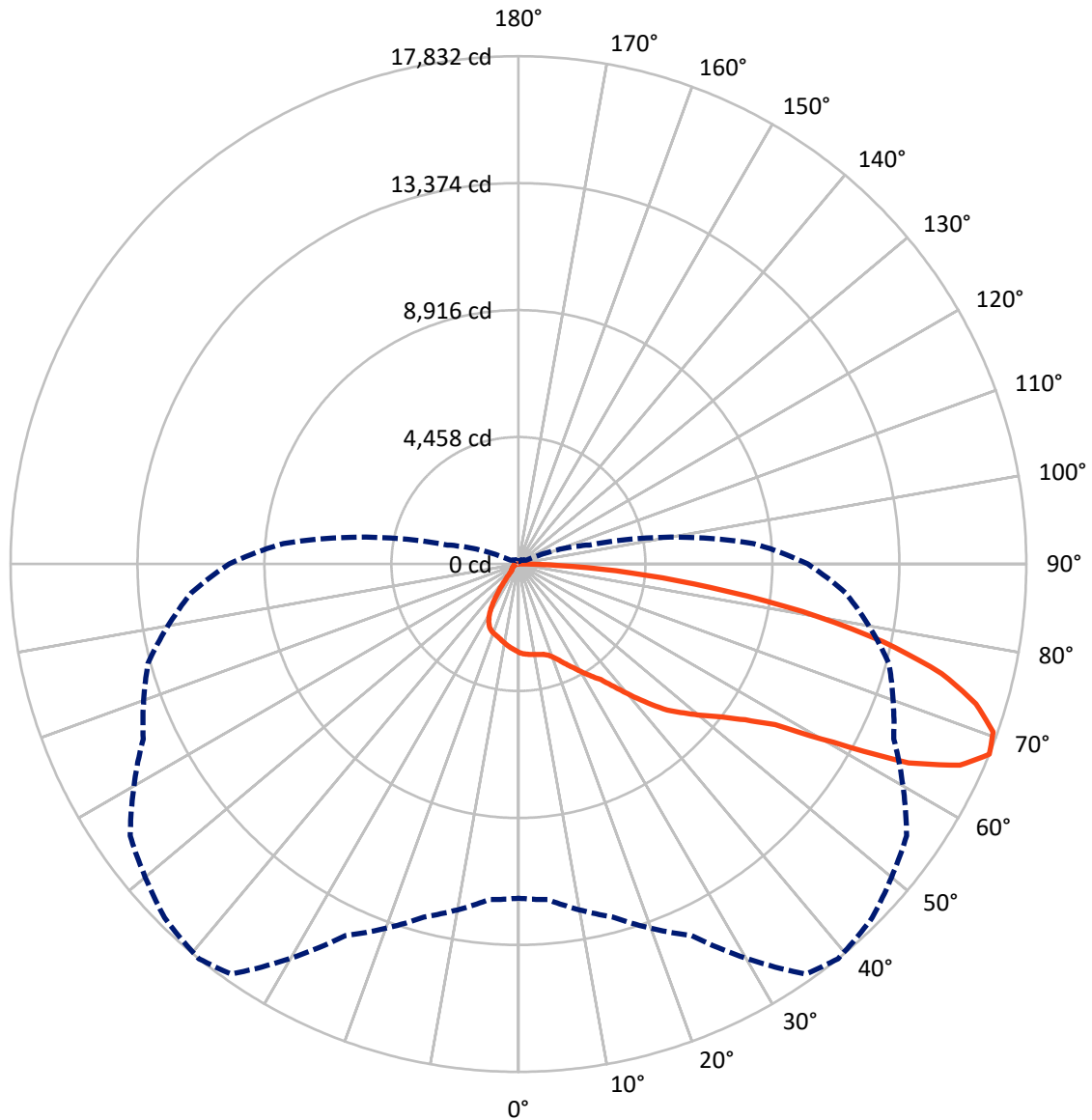
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.7 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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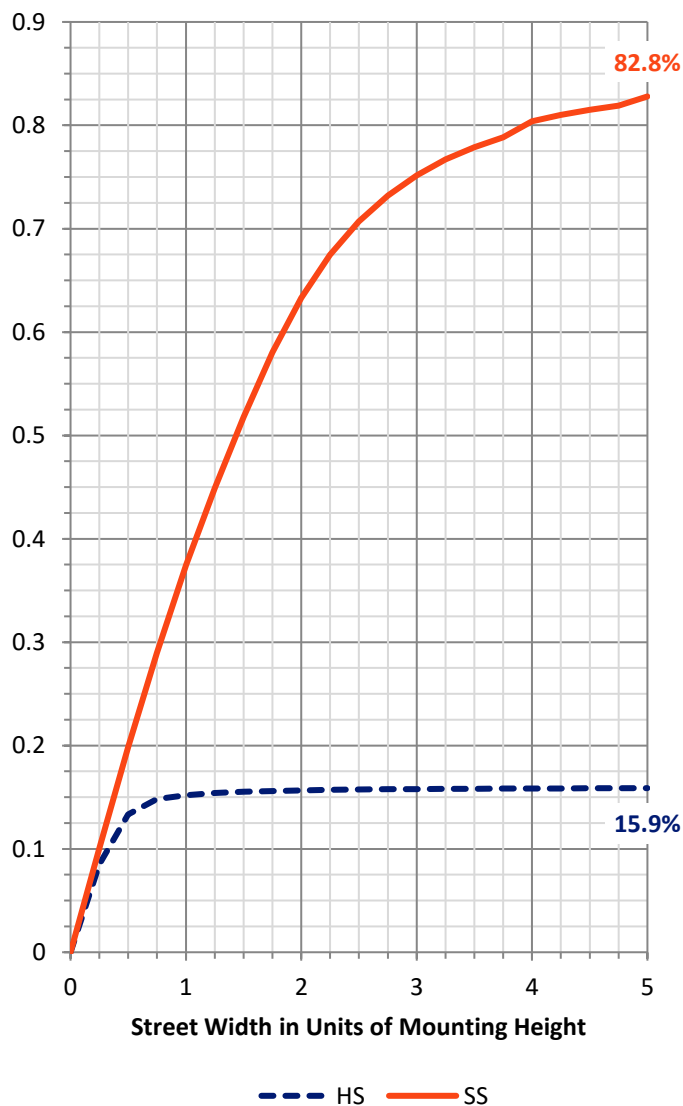
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4765.7	0.0	4765.7
	% Fixture	16.1	0.0	16.1
Street Side	Lumens	24913.3	0.0	24913.3
	% Fixture	83.9	0.0	83.9
Total	Lumens	29679.0	0.0	29679.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	293.4	1.0
10°-20°	873.2	2.9
20°-30°	1547.0	5.2
30°-40°	2477.9	8.3
40°-50°	3975.0	13.4
50°-60°	5810.3	19.6
60°-70°	7742.5	26.1
70°-80°	5810.1	19.6
80°-90°	1149.6	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°	29679.0	100.0
0°-180°	29679.0	100.0

Coefficient of Utilization



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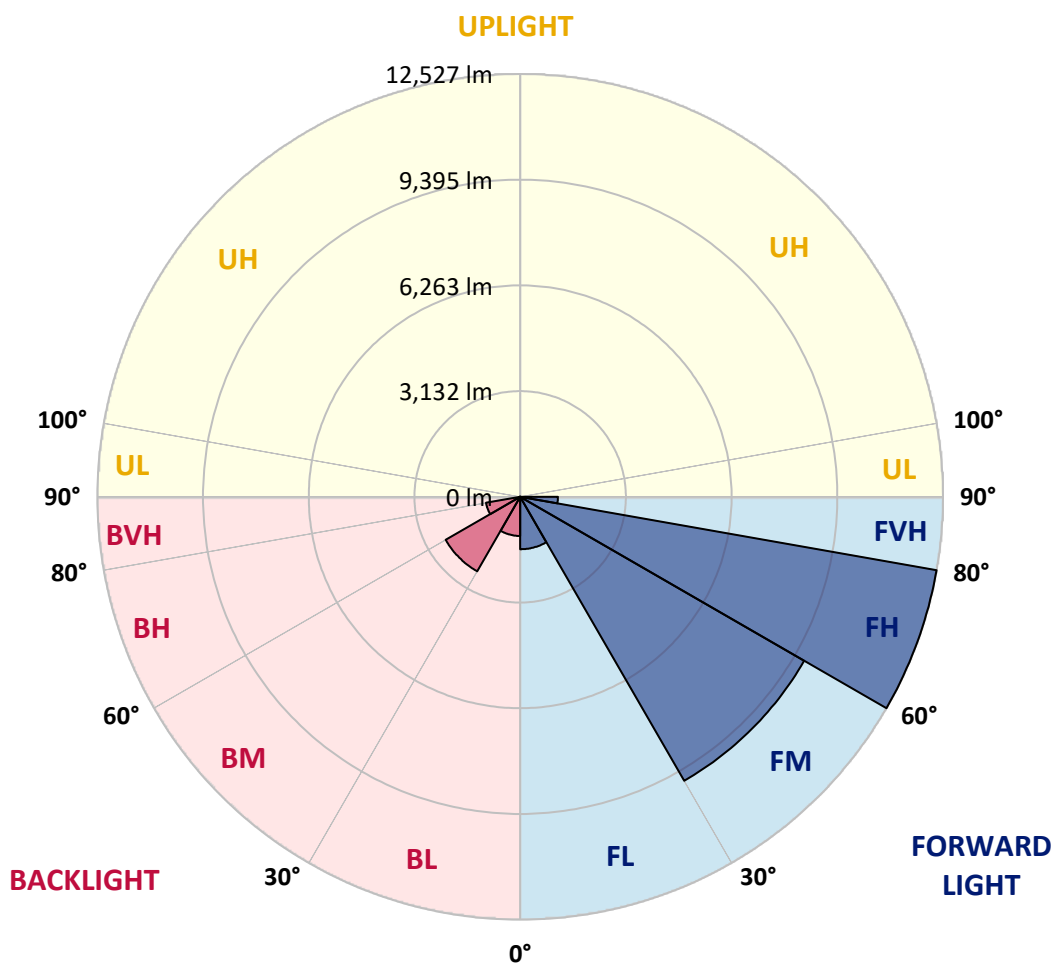
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1553.1	5.2			
FM	(30°-60°)	9714.2	32.7			
FH	(60°-80°)	12526.5	42.2			G5
FVH	(80°-90°)	1119.4	3.8			G5
BL	(0°-30°)	1160.5	3.9	B3/2500		
BM	(30°-60°)	2549.0	8.6	B3/5000		
BH	(60°-80°)	1026.1	3.5	B3/2500		G3/2500
BVH	(80°-90°)	30.1	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°	3107.7	3107.7	3107.7	3107.7	3107.7	3107.7	3107.7	3107.7	3107.7	3107.7	3107.7
2.5°	3110.7	3152.4	3152.4	3140.5	3148.0	3153.9	3109.2	3121.1	3116.7	3115.2	3124.1
5°	3134.6	3180.8	3177.8	3162.9	3168.8	3180.8	3139.0	3156.9	3151.0	3136.0	3139.0
7.5°	3134.6	3173.3	3182.3	3165.9	3194.2	3209.1	3164.4	3180.8	3188.2	3177.8	3167.4
10°	3122.6	3156.9	3168.8	3165.9	3203.1	3227.0	3183.8	3230.0	3236.0	3236.0	3219.5
12.5°	3118.1	3156.9	3173.3	3186.7	3230.0	3255.3	3230.0	3274.7	3304.5	3303.1	3292.6
15°	3121.1	3164.4	3189.7	3212.1	3258.3	3289.6	3279.2	3347.8	3383.6	3394.0	3394.0
17.5°	3195.7	3247.9	3259.8	3283.7	3315.0	3362.7	3349.3	3437.3	3493.9	3511.8	3537.2
20°	3404.5	3444.7	3459.6	3447.7	3461.1	3491.0	3464.1	3549.1	3634.1	3681.8	3723.6
22.5°	3671.4	3701.2	3687.8	3675.9	3668.4	3675.9	3643.1	3699.7	3795.2	3863.8	3935.3
25°	3874.2	3939.8	3929.4	3896.6	3886.1	3895.1	3853.3	3923.4	4011.4	4083.0	4190.3
27.5°	4120.2	4160.5	4132.2	4120.2	4127.7	4126.2	4100.9	4168.0	4248.5	4338.0	4496.0
30°	4387.2	4421.5	4393.1	4381.2	4394.6	4403.6	4375.2	4493.1	4578.1	4675.0	4879.3
32.5°	4825.6	4907.6	4830.1	4675.0	4678.0	4691.4	4694.4	4852.4	5007.5	5083.6	5353.5
35°	5450.4	5516.0	5413.1	5225.2	4991.1	4982.2	5006.0	5241.6	5553.3	5899.3	6215.4
37.5°	6033.5	6128.9	6036.5	5817.3	5532.4	5463.8	5340.1	5620.4	6111.0	6855.2	7248.8
40°	6732.9	6804.4	6621.0	6430.2	6145.3	6048.4	5850.1	6029.0	6701.6	7852.8	8124.2
42.5°	7295.1	7338.3	7186.2	6986.4	6738.8	6665.8	6461.5	6477.9	7332.3	8726.6	8901.1
45°	7815.5	7861.7	7736.5	7566.5	7409.9	7321.9	7172.8	7253.3	8072.0	9648.2	9542.3
47.5°	8210.7	8256.9	8157.0	8036.2	7873.7	7814.0	7817.0	8106.3	8977.2	10384.9	10117.9
50°	8857.9	8840.0	8579.0	8447.8	8321.0	8352.3	8385.1	8796.7	9889.8	11017.2	10650.3
52.5°	9986.7	9898.7	9360.4	9017.4	8860.8	8914.5	8968.2	9515.5	10926.2	11594.3	11058.9
55°	11263.2	11173.7	10715.9	9982.2	9567.7	9654.2	9607.9	10226.8	11797.1	12149.0	11395.9
57.5°	12211.6	12359.3	12184.8	11785.1	10747.2	10633.9	10531.0	10945.6	12500.9	12703.7	11719.5
60°	13036.3	13242.1	13553.7	13444.9	13003.5	12708.2	11764.3	11785.1	13177.9	13088.5	11847.8
62.5°	13841.5	13962.3	14496.2	14614.0	15161.3	15373.0	14414.2	12870.7	13832.6	13355.4	11934.3
65°	13036.3	13191.4	14120.4	14977.8	16746.4	17029.8	16692.7	14836.2	14314.2	13513.5	11834.3
67.5°	11734.4	11828.4	12832.0	14391.8	17575.6	17832.0	17569.6	16640.6	14539.4	13465.7	11524.2
70°	10032.9	10180.6	11166.3	13257.0	17545.7	17682.9	17454.8	16858.3	14454.4	13191.4	10741.3
72.5°	8297.2	8380.7	9215.8	11302.0	16688.3	16803.1	16682.3	16524.2	14168.1	12426.4	9236.6
75°	6236.3	6254.2	7110.1	8925.0	14755.6	15355.1	15502.8	15948.6	13072.1	10651.8	6831.3
77.5°	4181.4	4358.8	5180.5	6820.9	12113.2	13072.1	13771.4	14096.5	10921.7	7949.7	3632.6
80°	2244.3	2289.0	3174.8	4840.5	9205.3	10122.4	10786.0	10792.0	7638.0	3938.3	811.2
82.5°	1039.4	996.1	1598.6	3063.0	6376.5	6785.1	7229.4	6055.9	3058.5	672.5	207.3
85°	460.8	486.1	723.2	1492.7	3538.7	3948.8	3892.1	2681.2	536.8	181.9	126.8
87.5°	171.5	180.4	280.3	602.5	1263.1	1377.9	1239.2	516.0	70.1	64.1	38.8
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°	3107.7	3107.7	3107.7	3107.7	3107.7	3107.7	3107.7	3107.7	3107.7	3107.7	3107.7
2.5°	3113.7	3113.7	3110.7	3070.4	3061.5	3042.1	3025.7	3037.6	3024.2	3033.1	3024.2
5°	3127.1	3119.6	3101.7	3054.0	3031.7	2988.4	2955.6	2963.1	2945.2	2945.2	2943.7
7.5°	3158.4	3143.5	3112.2	3036.1	2994.4	2931.7	2881.0	2864.6	2846.7	2825.9	2822.9
10°	3209.1	3188.2	3146.5	3042.1	2961.6	2878.1	2790.1	2755.8	2711.0	2678.2	2672.3
12.5°	3279.2	3247.9	3191.2	3064.5	2958.6	2825.9	2708.1	2641.0	2587.3	2539.6	2529.1
15°	3380.6	3349.3	3282.2	3109.2	2960.1	2776.7	2621.6	2509.7	2417.3	2372.5	2374.0
17.5°	3528.2	3505.9	3403.0	3203.1	2988.4	2751.3	2550.0	2372.5	2229.4	2154.8	2144.4
20°	3717.6	3702.7	3577.4	3326.9	3054.0	2755.8	2472.4	2226.4	2016.1	1853.6	1817.8
22.5°	3938.3	3916.0	3762.4	3434.3	3104.7	2743.8	2387.4	2065.3	1749.2	1537.5	1495.7
25°	4184.4	4172.4	3932.4	3528.2	3110.7	2693.1	2265.2	1856.6	1459.9	1233.2	1197.5
27.5°	4499.0	4428.9	4086.0	3578.9	3097.3	2593.2	2090.7	1570.3	1160.2	1003.6	964.8
30°	4843.5	4701.8	4235.1	3617.7	3031.7	2433.7	1841.7	1239.2	863.4	724.7	705.3
32.5°	5225.2	5013.5	4375.2	3614.7	2915.3	2187.6	1518.1	860.4	583.1	526.4	507.0
35°	5915.7	5556.3	4543.8	3565.5	2720.0	1895.3	1072.2	560.7	432.5	398.2	393.7
37.5°	6874.5	6264.6	4770.4	3471.6	2468.0	1555.3	699.4	383.2	369.8	371.3	369.8
40°	7660.4	7055.0	5085.1	3329.9	2150.3	1111.0	419.0	341.5	348.9	353.4	354.9
42.5°	8429.9	7699.2	5474.3	3152.4	1817.8	721.8	340.0	326.6	320.6	328.1	331.1
45°	9048.7	8261.4	5841.1	2945.2	1428.6	426.5	329.6	302.7	292.3	295.3	299.7
47.5°	9543.8	8708.7	6061.8	2703.6	1043.9	322.1	320.6	281.8	266.9	263.9	262.5
50°	10010.6	9092.0	6203.5	2411.3	665.1	310.2	296.8	258.0	240.1	237.1	237.1
52.5°	10328.2	9342.5	6251.2	2065.3	396.7	302.7	280.3	238.6	214.7	219.2	222.2
55°	10638.4	9596.0	6152.8	1615.0	304.2	283.3	262.5	214.7	195.4	213.2	219.2
57.5°	10786.0	9633.3	5930.6	1122.9	295.3	256.5	237.1	192.4	177.5	187.9	187.9
60°	10905.3	9607.9	5620.4	711.3	287.8	238.6	216.2	174.5	156.6	150.6	146.1
62.5°	10826.3	9506.5	4997.1	463.8	266.9	217.7	196.8	161.1	135.7	119.3	117.8
65°	10657.8	9148.7	3989.0	365.3	247.5	207.3	178.9	144.6	119.3	99.9	98.4
67.5°	10161.2	8277.8	2581.3	302.7	237.1	199.8	165.5	134.2	105.9	86.5	85.0
70°	8971.2	6686.6	791.8	271.4	246.1	192.4	162.5	122.3	93.9	76.1	73.1
72.5°	7093.7	4467.7	293.8	225.2	211.8	184.9	158.1	110.4	80.5	64.1	61.1
75°	4569.1	1459.9	249.0	174.5	180.4	176.0	146.1	101.4	68.6	52.2	50.7
77.5°	1294.4	305.7	226.7	128.2	159.6	170.0	128.2	85.0	61.1	44.7	43.2
80°	271.4	217.7	207.3	91.0	119.3	110.4	86.5	65.6	58.2	38.8	38.8
82.5°	177.5	173.0	177.5	62.6	79.0	80.5	68.6	56.7	50.7	35.8	35.8
85°	125.3	158.1	85.0	44.7	37.3	34.3	40.3	49.2	44.7	29.8	29.8
87.5°	43.2	25.4	17.9	17.9	16.4	16.4	19.4	22.4	23.9	23.9	22.4
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)