

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: P509894

Luminaire Tested: **VERD-M-CA3-160-740-U-T3-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P509894
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-5)
Test Lab: INNOVATION CENTER
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-M-CA3-160-740-U-T3-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1000mA LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21778 lumens
Efficiency: N/A
Efficacy: 133.9 lumens/watt
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G3

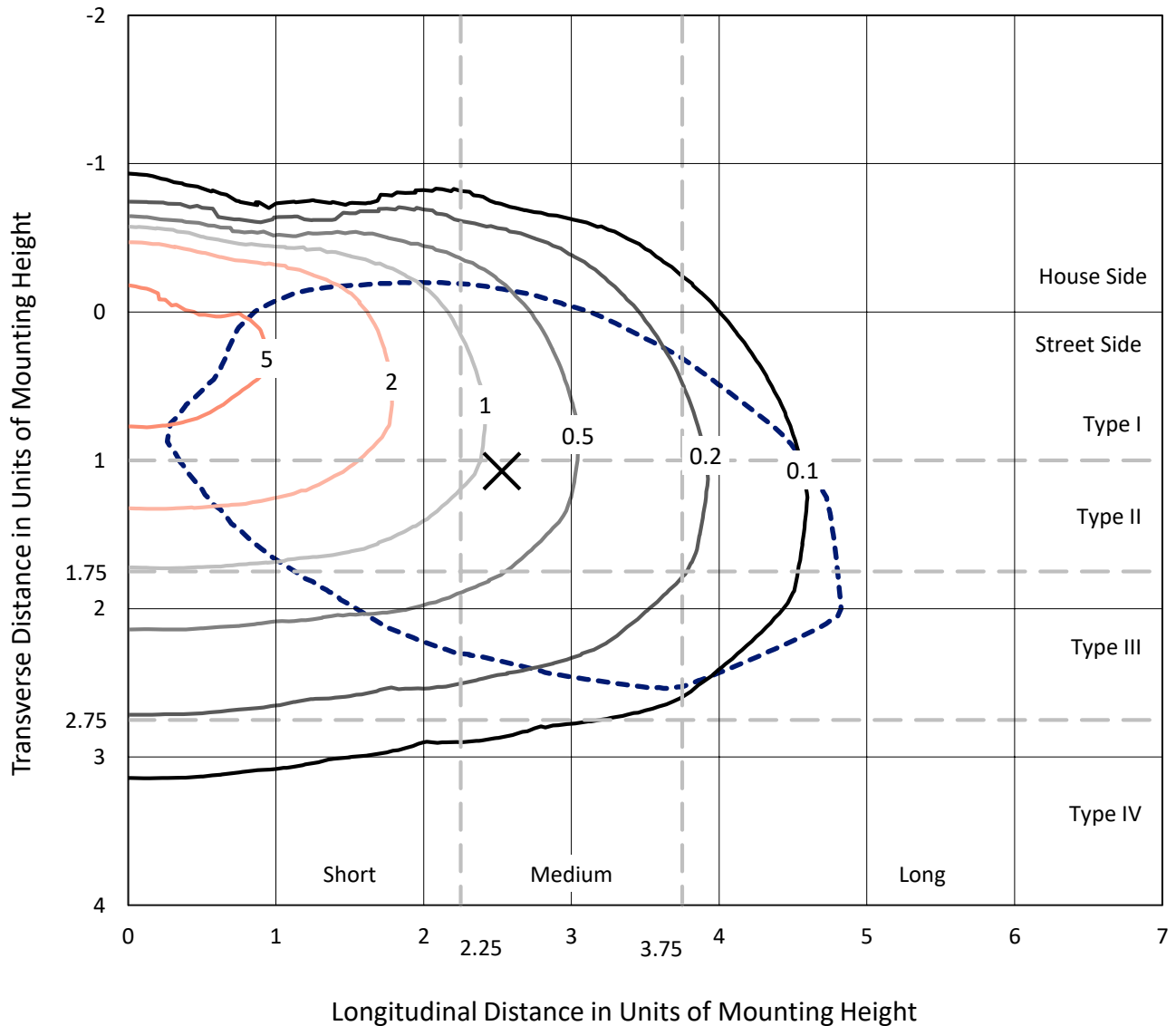
Input Watts (W): 162.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

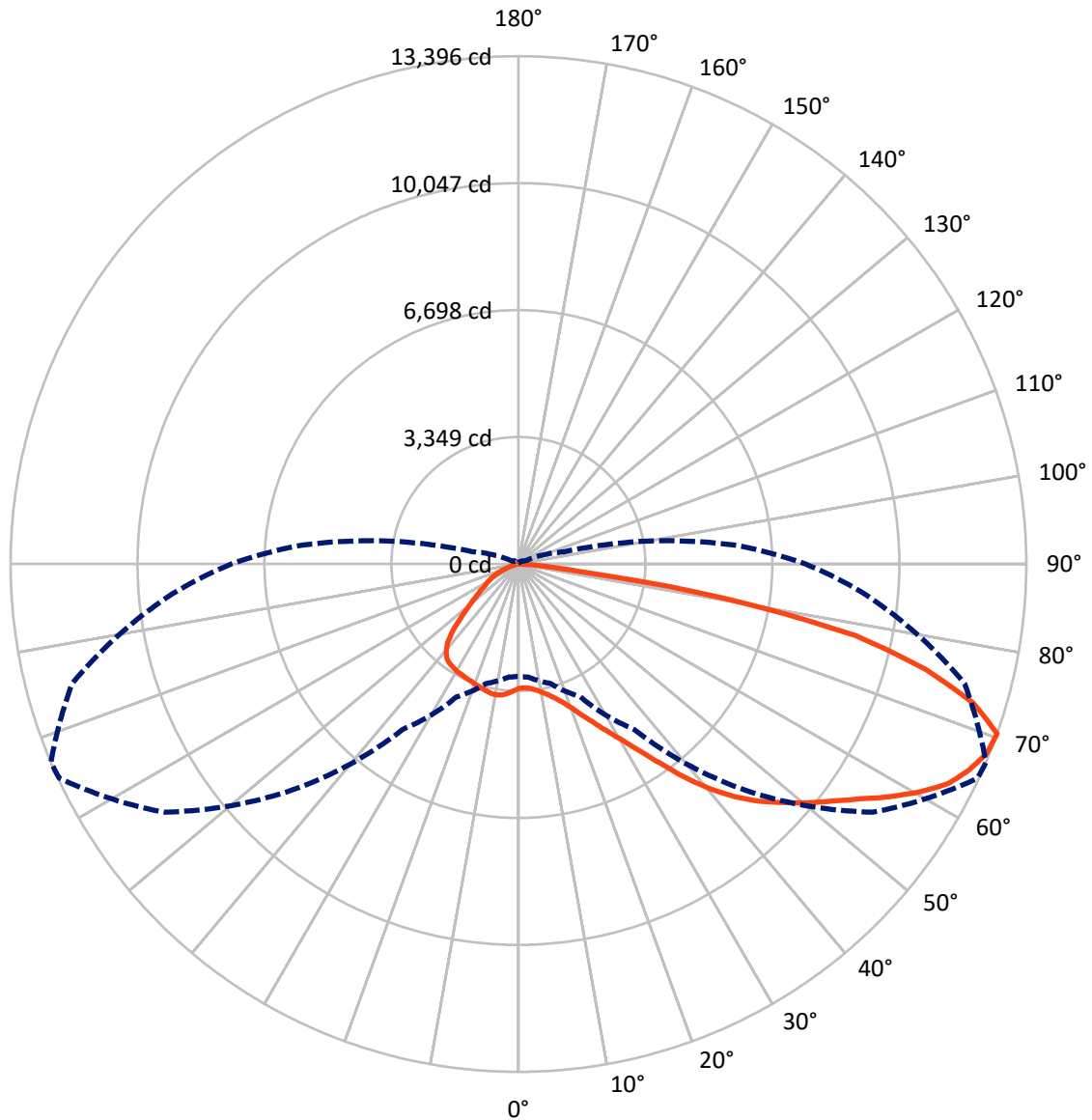
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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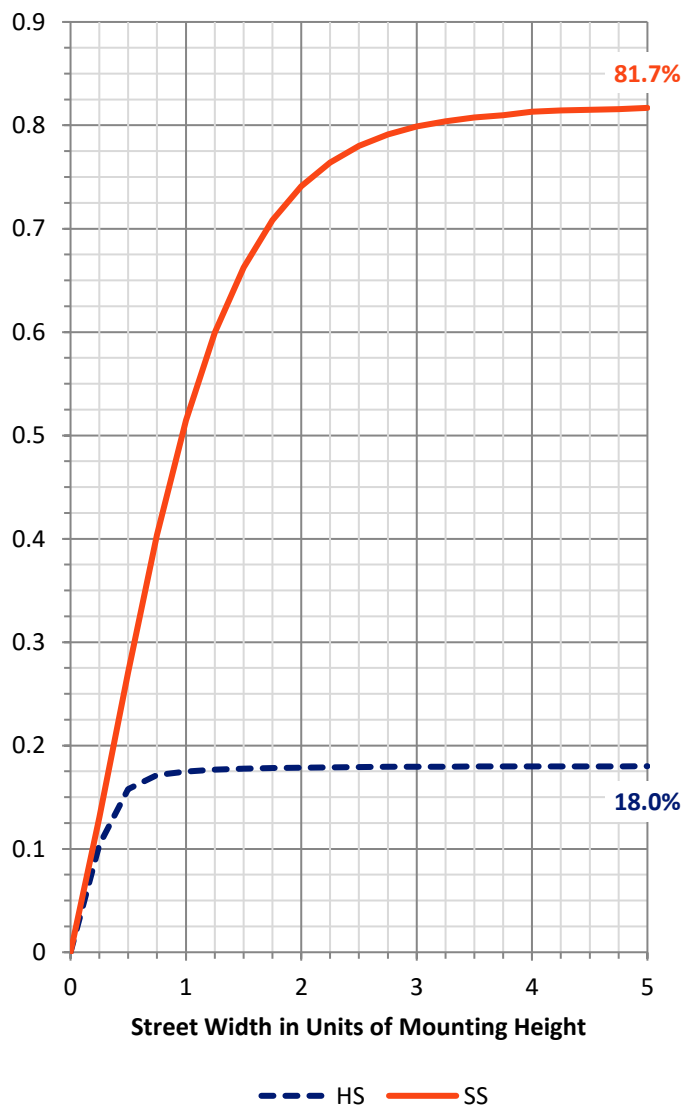
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3968.1	0.0	3968.1
	% Fixture	18.2	0.0	18.2
Street Side	Lumens	17809.9	0.0	17809.9
	% Fixture	81.8	0.0	81.8
Total	Lumens	21778.0	0.0	21778.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	326.4	1.5
10°-20°	1018.2	4.7
20°-30°	1766.7	8.1
30°-40°	2623.9	12.0
40°-50°	3599.8	16.5
50°-60°	4420.8	20.3
60°-70°	4739.6	21.8
70°-80°	3008.8	13.8
80°-90°	273.8	1.3
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°	21778.0	100.0
0°-180°	21778.0	100.0

Coefficient of Utilization



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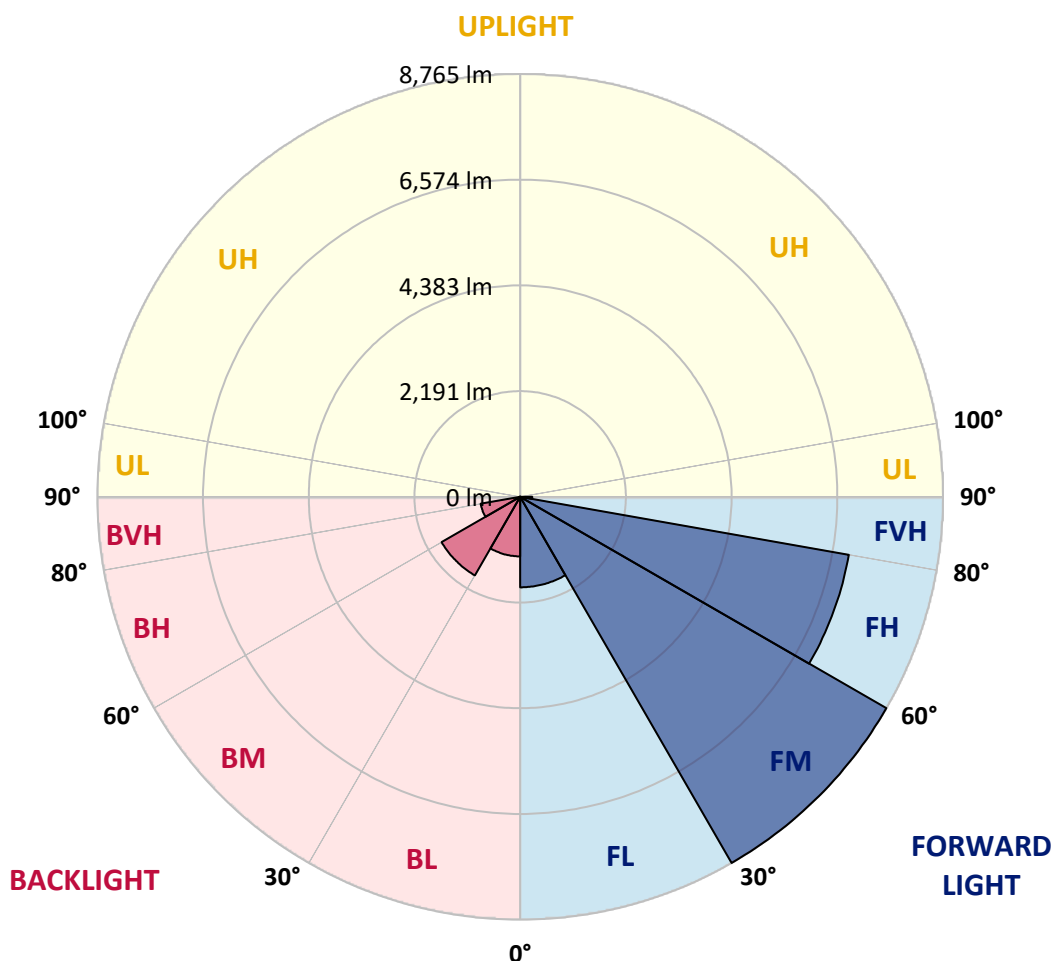
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1876.4	8.6			
FM (30°-60°)	8765.4	40.2			
FH (60°-80°)	6918.3	31.8			G3/7500
FVH (80°-90°)	249.7	1.1			G3/500
BL (0°-30°)	1234.9	5.7	B3/2500		
BM (30°-60°)	1879.1	8.6	B2/2500		
BH (60°-80°)	830.0	3.8	B2/1000		G2/1000
BVH (80°-90°)	24.1	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-G3

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9
2.5°	3246.4	3277.0	3259.0	3256.9	3278.0	3258.0	3271.7	3268.5	3266.4	3269.6	3291.7
5°	3331.7	3367.6	3343.3	3336.0	3347.6	3311.7	3308.6	3301.2	3299.1	3300.1	3331.7
7.5°	3450.8	3493.0	3483.5	3464.5	3458.2	3399.2	3388.6	3362.3	3353.9	3356.0	3387.6
10°	3638.4	3680.5	3661.5	3619.4	3593.1	3525.6	3487.7	3454.0	3437.1	3439.2	3472.9
12.5°	3878.6	3918.6	3887.0	3810.1	3795.4	3686.8	3627.8	3556.2	3544.6	3527.7	3563.6
15°	4105.1	4139.9	4125.2	4053.5	4013.5	3884.9	3776.4	3687.9	3677.4	3661.5	3660.5
17.5°	4355.9	4390.7	4363.3	4310.6	4257.9	4105.1	3988.2	3874.4	3847.0	3833.3	3783.8
20°	4623.6	4678.4	4673.1	4629.9	4566.7	4387.5	4222.1	4093.6	4064.1	4038.8	3934.5
22.5°	4899.6	4971.3	4955.5	4932.3	4905.9	4704.7	4511.9	4363.3	4341.2	4287.4	4123.1
25°	5205.2	5254.7	5243.1	5254.7	5236.8	5058.7	4848.0	4666.8	4637.3	4586.7	4334.9
27.5°	5501.3	5552.9	5572.9	5548.7	5560.3	5432.8	5183.1	5020.8	4992.4	4899.6	4589.8
30°	5768.9	5833.2	5861.6	5872.2	5911.2	5779.5	5595.1	5398.0	5388.5	5293.7	4926.0
32.5°	5982.8	6054.5	6124.0	6169.3	6231.5	6173.5	5990.2	5871.1	5872.2	5786.8	5430.7
35°	6137.7	6219.9	6321.0	6441.2	6571.8	6547.6	6439.1	6441.2	6458.0	6486.5	6074.5
37.5°	6309.5	6375.8	6494.9	6662.4	6861.6	6912.2	6897.4	7064.9	7147.1	7197.7	6640.3
40°	6411.7	6479.1	6627.7	6853.2	7142.9	7264.1	7400.0	7694.0	7801.5	7748.8	7124.0
42.5°	6298.9	6359.0	6617.1	7007.0	7373.7	7648.7	7892.1	8322.0	8400.0	8228.2	7531.7
45°	6152.5	6230.4	6502.3	7049.1	7578.1	8025.9	8404.2	8868.9	8926.8	8683.4	7892.1
47.5°	6032.3	6100.8	6418.0	7003.8	7766.7	8412.6	8854.1	9385.2	9399.9	9099.6	8265.1
50°	5878.5	5961.7	6292.6	6948.0	7880.5	8755.1	9266.1	9866.7	9899.4	9530.6	8581.2
52.5°	5717.3	5798.4	6140.9	6856.3	7962.7	9039.5	9693.9	10378.8	10381.9	9986.8	8918.4
55°	5479.2	5565.6	5944.9	6723.6	7988.0	9228.2	10123.8	10901.4	10934.1	10449.4	9223.9
57.5°	5227.3	5301.1	5708.9	6517.0	7894.2	9406.2	10565.3	11482.0	11571.5	10970.9	9486.3
60°	4893.3	4967.1	5398.0	6246.2	7695.0	9606.4	11071.0	12181.6	12191.1	11393.5	9677.0
62.5°	4534.0	4598.3	4994.5	5821.6	7386.3	9683.3	11505.2	12741.1	12740.1	11769.6	9771.9
65°	4107.3	4133.6	4537.2	5300.0	6906.9	9570.6	11696.9	13109.9	13074.1	12040.4	9740.2
67.5°	3601.5	3629.9	3935.5	4652.0	6211.5	9130.2	11611.6	13288.0	13323.8	12281.7	9603.3
70°	2960.8	2994.6	3261.1	3866.0	5325.3	8427.4	11411.4	13364.9	13395.5	12184.8	9180.7
72.5°	2185.3	2230.6	2394.0	2877.6	4041.9	7080.8	10484.1	12523.0	12539.9	11375.6	8300.9
75°	1357.1	1440.4	1594.2	1912.4	2622.6	4966.0	8961.6	11195.4	11090.0	10147.0	6869.0
77.5°	542.6	556.3	633.3	895.6	1279.2	2585.7	6496.0	8899.4	9100.7	8118.6	4913.3
80°	316.1	314.0	331.9	417.3	549.0	884.0	2526.7	4992.4	5564.5	4459.2	2210.6
82.5°	255.0	245.5	245.5	267.6	263.4	372.0	828.2	1458.3	1599.5	1419.3	629.0
85°	133.8	130.7	106.4	131.7	131.7	185.4	318.2	413.0	436.2	380.4	236.0
87.5°	33.7	33.7	33.7	41.1	32.7	39.0	53.7	65.3	67.4	54.8	34.8
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°	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9	3275.9
2.5°	3300.1	3309.6	3346.5	3341.2	3347.6	3347.6	3358.1	3369.7	3404.5	3384.4	3376.0
5°	3338.1	3357.0	3403.4	3420.3	3445.5	3448.7	3469.8	3477.2	3515.1	3494.0	3494.0
7.5°	3410.8	3432.9	3476.1	3482.4	3494.0	3474.0	3479.3	3456.1	3481.4	3456.1	3457.1
10°	3493.0	3507.7	3537.2	3495.1	3477.2	3429.7	3419.2	3362.3	3382.3	3349.7	3341.2
12.5°	3572.0	3566.7	3544.6	3469.8	3420.3	3342.3	3309.6	3232.7	3228.5	3185.3	3176.9
15°	3646.8	3609.9	3538.3	3422.4	3338.1	3229.5	3151.6	3067.3	3037.8	2988.2	2984.0
17.5°	3738.5	3675.2	3547.8	3377.1	3239.0	3081.0	2970.3	2875.5	2814.4	2769.1	2768.0
20°	3850.2	3753.2	3552.0	3325.4	3136.8	2934.5	2779.6	2659.5	2572.0	2515.1	2514.1
22.5°	3990.3	3858.6	3591.0	3266.4	3006.2	2757.5	2564.7	2357.1	2237.0	2121.1	2100.0
25°	4154.7	3965.0	3624.7	3235.9	2877.6	2573.1	2286.5	1983.0	1796.5	1703.8	1669.0
27.5°	4385.4	4142.0	3674.2	3177.9	2756.4	2345.5	1928.2	1597.4	1372.9	1293.9	1293.9
30°	4652.0	4365.4	3766.9	3143.1	2587.8	2026.2	1535.2	1180.1	971.5	852.4	849.3
32.5°	5058.7	4632.0	3851.2	3068.3	2383.4	1678.5	1110.6	760.8	593.2	519.5	515.3
35°	5643.5	5139.9	3987.1	2993.5	2087.3	1249.7	704.9	436.2	338.2	296.1	294.0
37.5°	6206.2	5623.5	4280.1	2844.9	1666.9	785.0	390.9	251.8	206.5	201.3	199.1
40°	6602.4	6040.8	4486.6	2618.4	1184.3	416.2	226.5	182.3	179.1	177.0	176.0
42.5°	7034.4	6350.5	4633.0	2329.7	702.8	241.3	184.4	164.4	159.1	157.0	157.0
45°	7385.3	6648.7	4660.4	1916.6	354.0	199.1	168.6	149.6	143.3	147.5	148.6
47.5°	7708.7	6930.1	4567.7	1441.4	239.2	185.4	158.1	139.1	134.9	145.4	145.4
50°	7984.8	7168.2	4354.9	1075.8	224.4	174.9	147.5	128.5	127.5	137.0	138.0
52.5°	8259.8	7360.0	4019.8	812.4	212.8	163.3	137.0	119.1	115.9	122.2	123.3
55°	8477.9	7428.5	3771.1	604.8	204.4	152.8	127.5	109.6	102.2	101.2	103.3
57.5°	8598.1	7368.4	3527.7	444.7	194.9	143.3	118.0	96.9	85.3	85.3	85.3
60°	8600.2	7295.7	3267.5	351.9	184.4	132.8	107.5	83.2	71.7	69.5	69.5
62.5°	8577.0	7166.1	2889.2	305.6	172.8	124.3	93.8	70.6	62.2	59.0	59.0
65°	8474.8	6921.6	2430.8	261.3	159.1	118.0	80.1	63.2	55.8	51.6	51.6
67.5°	8156.6	6463.3	1871.3	227.6	146.5	104.3	72.7	56.9	49.5	45.3	44.3
70°	7572.8	5722.6	1234.9	193.9	133.8	92.7	66.4	51.6	44.3	40.0	39.0
72.5°	6593.9	4657.3	620.6	164.4	114.9	85.3	60.1	45.3	37.9	33.7	33.7
75°	5167.3	3232.7	338.2	130.7	90.6	74.8	52.7	37.9	32.7	29.5	29.5
77.5°	3168.4	1602.7	230.8	101.2	68.5	61.1	42.1	31.6	28.4	27.4	27.4
80°	1155.9	524.7	154.9	71.7	51.6	47.4	33.7	27.4	26.3	26.3	26.3
82.5°	417.3	266.6	104.3	48.5	32.7	35.8	27.4	23.2	22.1	23.2	24.2
85°	171.8	117.0	37.9	27.4	17.9	19.0	16.9	15.8	16.9	17.9	17.9
87.5°	26.3	23.2	13.7	13.7	10.5	9.5	7.4	8.4	10.5	12.6	12.6
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)