

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: P510225

Luminaire Tested: **VERD-M-CA4-230-730-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510225
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-6)
Test Lab: INNOVATION CENTER
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-M-CA4-230-730-U-T4
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 3000K, 1050mA LEDS AND TYPE IV OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31770 lumens
Efficiency: N/A
Efficacy: 136.2 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

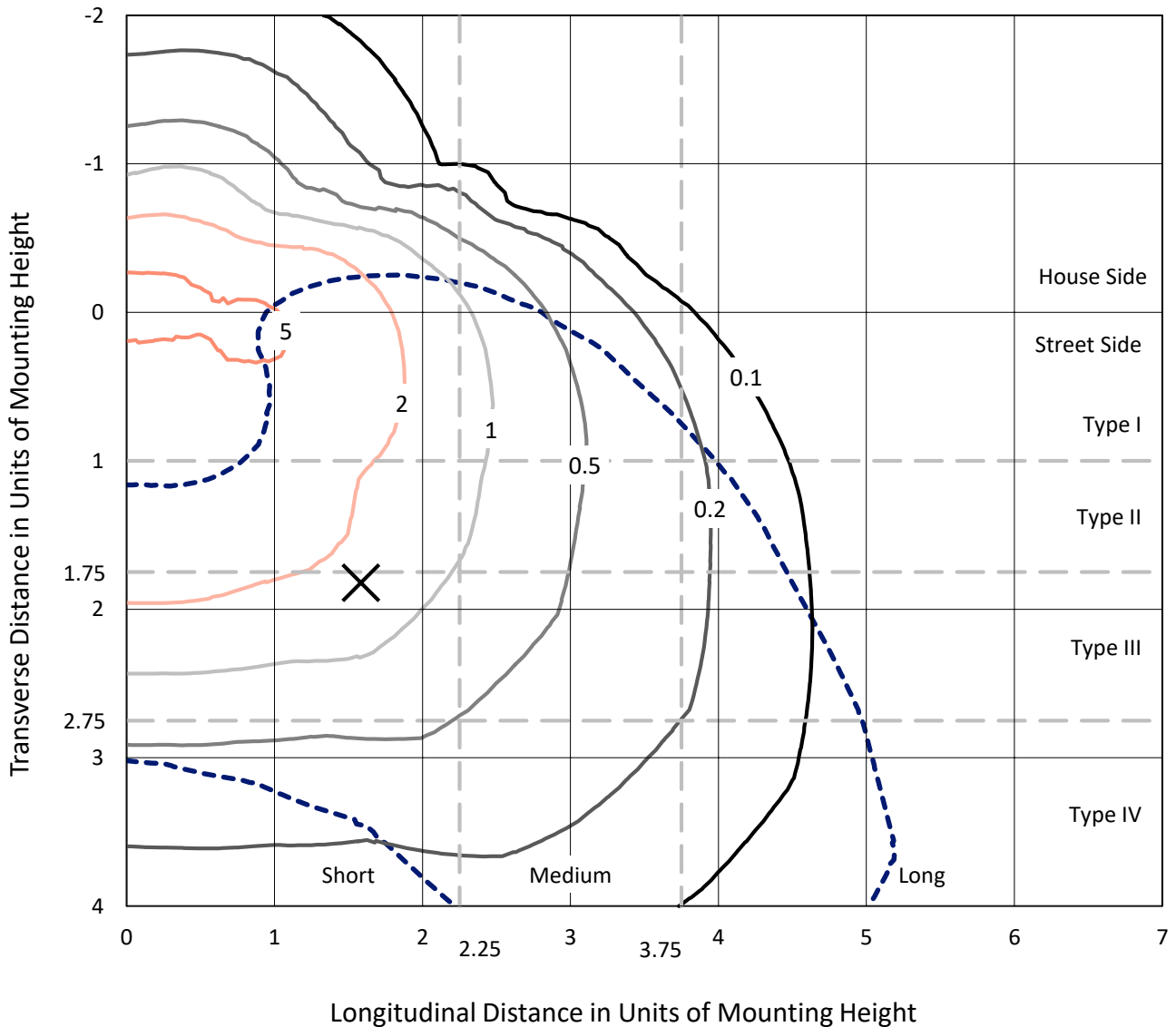
Input Watts (W): 233.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

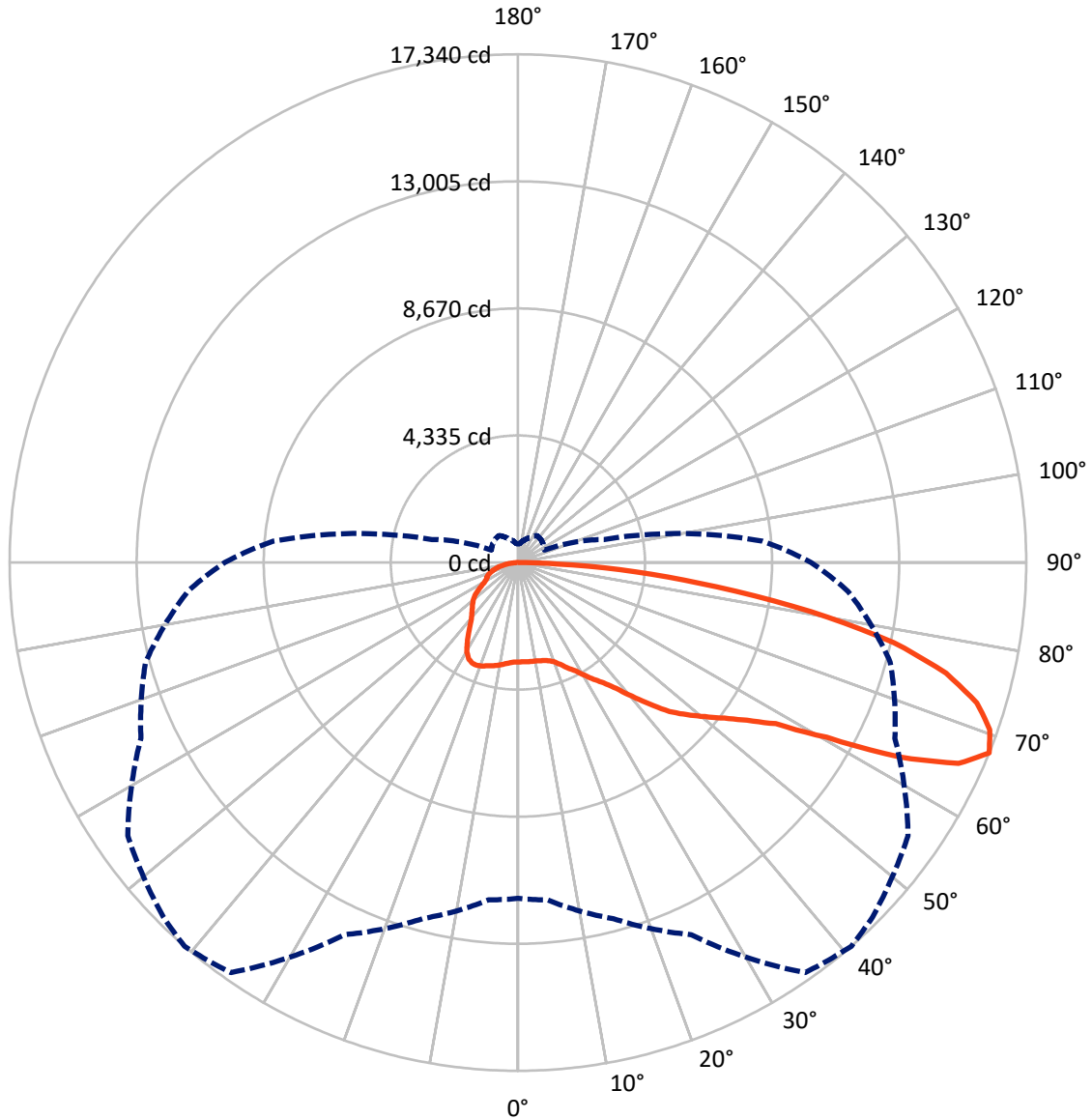
✕ Max cd
 - - - 1/2 Max cd



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 41-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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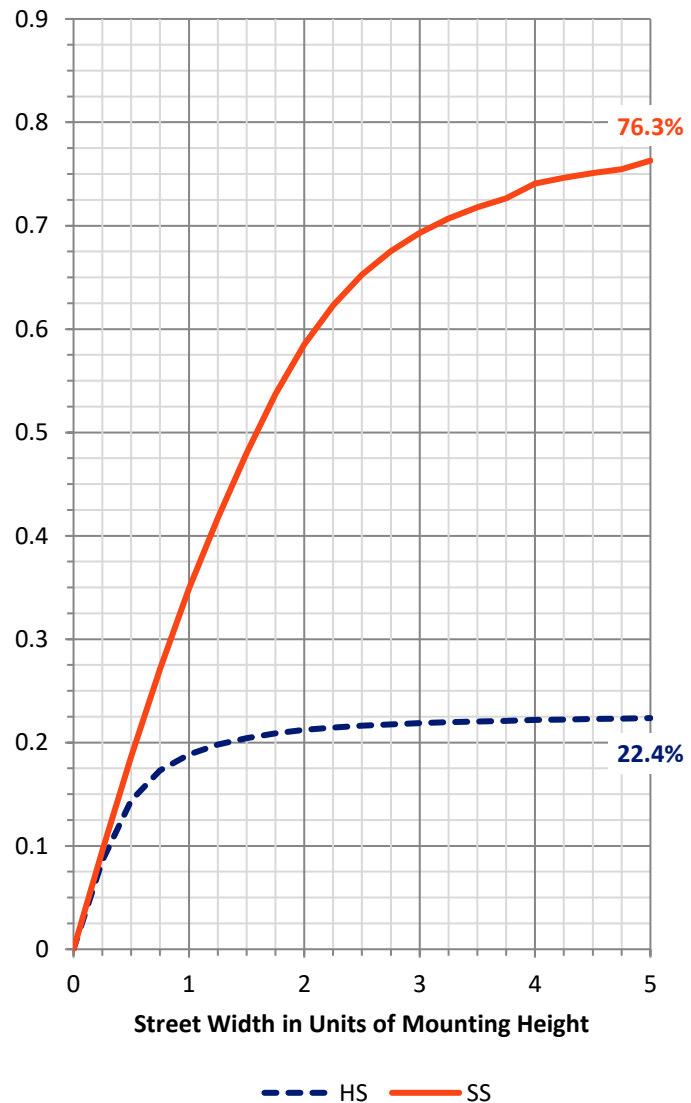
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7189.4	0.0	7189.4
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	24580.6	0.0	24580.6
	% Fixture	77.4	0.0	77.4
Total	Lumens	31770.0	0.0	31770.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	327.8	1.0
10°-20°	1016.6	3.2
20°-30°	1817.9	5.7
30°-40°	2850.5	9.0
40°-50°	4420.3	13.9
50°-60°	6231.5	19.6
60°-70°	7943.6	25.0
70°-80°	5944.5	18.7
80°-90°	1217.5	3.8
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°	31770.0	100.0
0°-180°	31770.0	100.0



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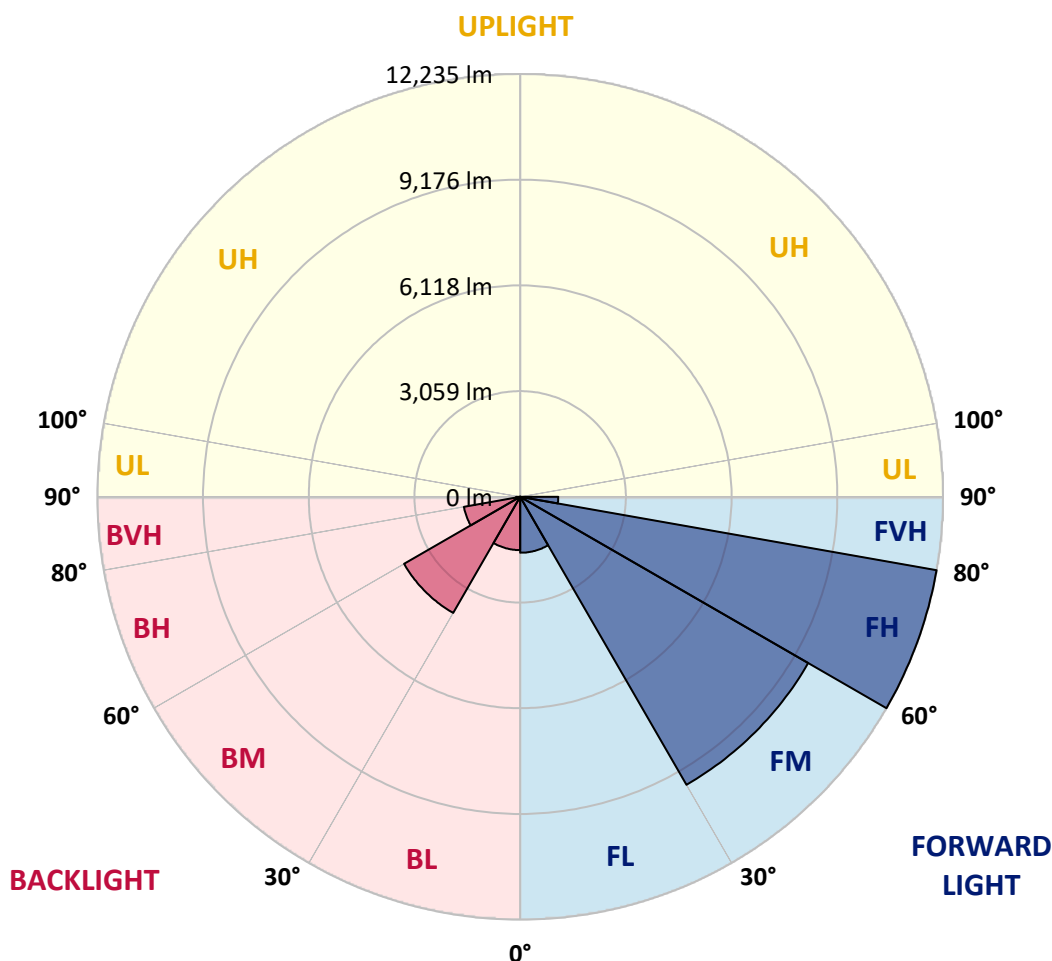
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1618.7	5.1			
FM (30°-60°)	9622.9	30.3			
FH (60°-80°)	12235.3	38.5			G5
FVH (80°-90°)	1103.8	3.5			G5
BL (0°-30°)	1543.5	4.9	B3/2500		
BM (30°-60°)	3879.3	12.2	B3/5000		
BH (60°-80°)	1652.8	5.2	B3/2500		G3/2500
BVH (80°-90°)	113.7	0.4			G2/225
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°	41°	45°	55°	65°	75°	85°
0°	3392.0	3392.0	3392.0	3392.0	3392.0	3392.0	3392.0	3392.0	3392.0	3392.0	3392.0
2.5°	3350.3	3389.1	3383.4	3376.2	3387.7	3389.1	3356.0	3369.0	3376.2	3387.7	3406.4
5°	3358.9	3397.7	3394.9	3381.9	3390.6	3394.9	3364.7	3387.7	3387.7	3392.0	3413.6
7.5°	3340.2	3377.6	3377.6	3373.3	3392.0	3409.2	3381.9	3402.1	3413.6	3425.1	3439.4
10°	3323.0	3354.6	3366.1	3363.2	3406.4	3410.7	3392.0	3440.9	3459.6	3471.1	3488.3
12.5°	3304.3	3343.1	3358.9	3374.7	3420.8	3436.6	3426.5	3476.8	3515.7	3535.8	3554.5
15°	3295.7	3338.8	3364.7	3387.7	3438.0	3466.8	3466.8	3543.0	3589.0	3614.9	3647.9
17.5°	3356.0	3400.6	3420.8	3439.4	3485.5	3524.3	3521.4	3610.6	3678.1	3718.4	3778.8
20°	3505.6	3558.8	3570.3	3577.5	3606.2	3620.6	3616.3	3712.6	3806.1	3882.3	3949.9
22.5°	3765.8	3797.5	3803.2	3774.5	3781.7	3793.2	3786.0	3839.2	3945.6	4034.7	4155.5
25°	3978.7	4029.0	4014.6	3972.9	3978.7	3994.5	3972.9	4054.9	4131.1	4247.5	4369.8
27.5°	4203.0	4240.4	4224.5	4198.7	4192.9	4181.4	4177.1	4282.1	4394.2	4486.2	4667.4
30°	4476.2	4496.3	4450.3	4438.8	4448.8	4456.0	4428.7	4562.4	4664.5	4796.8	5041.3
32.5°	4936.3	4955.0	4888.8	4712.0	4716.3	4749.4	4726.4	4894.6	5087.3	5248.3	5497.1
35°	5523.0	5523.0	5471.2	5222.4	5034.1	5035.5	5041.3	5278.5	5636.5	5997.5	6253.4
37.5°	6116.8	6136.9	6039.2	5812.0	5573.3	5446.7	5340.3	5645.2	6113.9	6919.2	7300.2
40°	6735.1	6766.7	6620.1	6411.6	6136.9	5993.1	5869.5	6055.0	6687.7	7832.2	8134.2
42.5°	7275.8	7320.3	7169.3	6949.3	6758.1	6595.6	6408.7	6483.5	7318.9	8699.3	8870.4
45°	7779.0	7803.5	7675.5	7494.3	7336.1	7247.0	7116.1	7202.4	8040.7	9547.6	9516.0
47.5°	8150.0	8185.9	8069.5	7971.7	7809.2	7756.0	7754.6	7991.8	8853.1	10223.4	10076.8
50°	8752.5	8725.1	8463.5	8344.1	8244.9	8262.1	8303.8	8713.6	9807.9	10874.8	10548.4
52.5°	9763.3	9713.0	9132.1	8883.3	8761.1	8817.2	8838.7	9367.9	10771.3	11437.0	10938.1
55°	11070.4	10909.3	10486.6	9819.4	9435.5	9488.7	9464.2	10071.0	11542.0	11973.4	11227.1
57.5°	11934.5	12085.5	11882.8	11501.7	10548.4	10374.4	10316.9	10767.0	12255.2	12486.7	11526.2
60°	12685.1	12935.3	13257.4	13013.0	12755.6	12104.2	11567.9	11557.8	12883.5	12828.9	11647.0
62.5°	13477.4	13609.7	14105.8	14256.7	14734.1	14614.8	13895.8	12558.6	13511.9	13079.1	11717.4
65°	12676.5	12853.3	13756.3	14580.3	16347.4	16520.0	16285.6	14419.2	13947.6	13207.1	11616.8
67.5°	11457.2	11554.9	12577.3	14006.5	17077.9	17339.6	17103.8	16245.3	14189.2	13151.0	11306.2
70°	9894.2	10009.2	10985.5	12935.3	17040.5	17075.0	16983.0	16413.6	14092.8	12887.9	10524.0
72.5°	8022.0	8167.2	9025.7	11050.2	16223.8	16373.3	16228.1	16080.0	13822.5	12151.7	9176.6
75°	6069.4	6262.0	7028.4	8810.0	14337.3	15090.7	15109.4	15566.7	12772.8	10417.6	6660.3
77.5°	4139.7	4323.8	5049.9	6712.1	11901.5	13105.0	13418.4	13918.8	10672.1	7698.5	3633.6
80°	2330.8	2313.6	3235.3	4795.4	9077.4	10134.3	10528.3	10508.1	7494.3	3952.8	740.5
82.5°	1077.0	1079.9	1655.0	3061.3	6145.6	6842.9	7002.6	6095.2	2629.9	670.1	235.8
85°	536.3	542.1	796.6	1535.7	3469.6	4008.9	3810.4	2536.4	563.7	195.6	140.9
87.5°	212.8	204.2	314.9	631.2	1252.4	1327.2	1158.9	507.6	102.1	69.0	47.5
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°	3392.0	3392.0	3392.0	3392.0	3392.0	3392.0	3392.0	3392.0	3392.0	3392.0	3392.0
2.5°	3402.1	3404.9	3417.9	3392.0	3399.2	3393.4	3389.1	3412.1	3410.7	3415.0	3407.8
5°	3412.1	3419.3	3432.3	3420.8	3432.3	3426.5	3430.8	3462.5	3466.8	3465.3	3465.3
7.5°	3439.4	3446.6	3471.1	3456.7	3482.6	3475.4	3476.8	3507.0	3512.8	3504.2	3501.3
10°	3497.0	3502.7	3537.2	3534.3	3544.4	3538.7	3532.9	3545.9	3543.0	3530.0	3524.3
12.5°	3563.1	3578.9	3617.7	3619.2	3632.1	3603.4	3573.2	3568.9	3560.2	3540.1	3535.8
15°	3662.3	3681.0	3740.0	3725.6	3717.0	3655.1	3604.8	3564.5	3530.0	3512.8	3497.0
17.5°	3804.7	3836.3	3918.3	3873.7	3810.4	3719.8	3632.1	3544.4	3471.1	3409.2	3384.8
20°	3985.8	4021.8	4090.8	4031.9	3935.5	3800.4	3658.0	3499.8	3340.2	3203.6	3183.5
22.5°	4201.5	4259.0	4309.4	4174.2	4031.9	3860.7	3658.0	3430.8	3166.2	2962.1	2911.7
25°	4453.2	4497.7	4481.9	4292.1	4086.5	3870.8	3617.7	3308.6	2934.7	2697.5	2657.2
27.5°	4726.4	4746.5	4624.3	4348.2	4092.3	3811.9	3504.2	3091.5	2664.4	2477.5	2438.7
30°	5062.8	5002.4	4769.5	4382.7	4034.7	3681.0	3301.4	2773.7	2444.4	2280.5	2235.9
32.5°	5425.2	5314.5	4873.0	4358.3	3908.2	3462.5	2987.9	2549.4	2297.8	2097.9	2060.5
35°	6115.4	5800.5	5024.0	4284.9	3688.2	3170.6	2684.6	2376.8	2142.5	1928.2	1893.7
37.5°	7047.1	6499.3	5235.4	4182.8	3427.9	2887.3	2458.8	2192.8	1990.0	1768.6	1714.0
40°	7771.8	7205.3	5574.7	4073.6	3187.8	2618.4	2294.9	2096.5	1889.4	1653.6	1606.1
42.5°	8462.0	7850.9	5991.7	3951.3	2940.5	2431.5	2223.0	2074.9	1862.1	1621.9	1577.4
45°	9071.7	8372.9	6351.2	3829.1	2661.5	2258.9	2169.8	2033.2	1823.3	1581.7	1538.5
47.5°	9564.9	8821.5	6663.2	3696.8	2408.5	2128.1	2100.8	1957.0	1748.5	1499.7	1448.0
50°	10010.6	9201.1	6878.9	3555.9	2161.2	2021.7	1987.2	1817.5	1600.4	1380.4	1347.3
52.5°	10285.3	9458.5	7008.3	3578.9	1926.8	1902.3	1846.3	1672.3	1471.0	1282.6	1239.5
55°	10572.8	9701.5	7006.9	3449.5	1731.2	1722.6	1669.4	1535.7	1377.5	1219.3	1193.5
57.5°	10690.8	9723.0	6876.0	2841.3	1558.7	1504.0	1492.5	1422.1	1284.0	1134.5	1105.7
60°	10769.8	9628.1	6628.7	1939.7	1341.6	1302.7	1358.8	1311.4	1186.3	1029.5	1000.8
62.5°	10692.2	9524.6	5980.2	1400.5	1176.2	1197.8	1251.0	1199.2	1068.4	926.0	901.6
65°	10506.7	9129.2	4722.0	1091.4	1102.9	1150.3	1192.0	1105.7	865.6	724.7	710.3
67.5°	10000.6	8377.2	3038.3	1000.8	1061.2	1110.1	1124.4	936.1	783.7	648.5	632.7
70°	8935.1	6725.0	1170.4	943.3	1019.5	1041.0	982.1	858.4	720.4	603.9	589.5
72.5°	6989.6	4415.8	675.8	862.7	930.3	910.2	911.6	770.7	649.9	539.2	527.7
75°	4343.9	1598.9	601.0	767.8	788.0	825.4	777.9	668.6	559.3	493.2	478.8
77.5°	1436.5	454.4	556.5	661.4	706.0	678.7	651.4	570.8	478.8	427.1	419.9
80°	348.0	340.8	498.9	517.6	553.6	507.6	504.7	474.5	404.0	373.9	366.7
82.5°	214.2	244.4	396.9	322.1	369.5	373.9	425.6	391.1	294.8	306.3	296.2
85°	132.3	188.4	208.5	155.3	156.7	209.9	254.5	235.8	176.9	166.8	165.4
87.5°	44.6	38.8	44.6	33.1	44.6	76.2	115.0	109.3	73.3	50.3	47.5
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)