

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: P510132

Luminaire Tested: **VERD-M-CA4-210-740-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510132
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-3)
Test Lab: INNOVATION CENTER
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-M-CA4-210-740-U-T2-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 4000K, 960mA LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27551 lumens
Efficiency: N/A
Efficacy: 129.0 lumens/watt
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

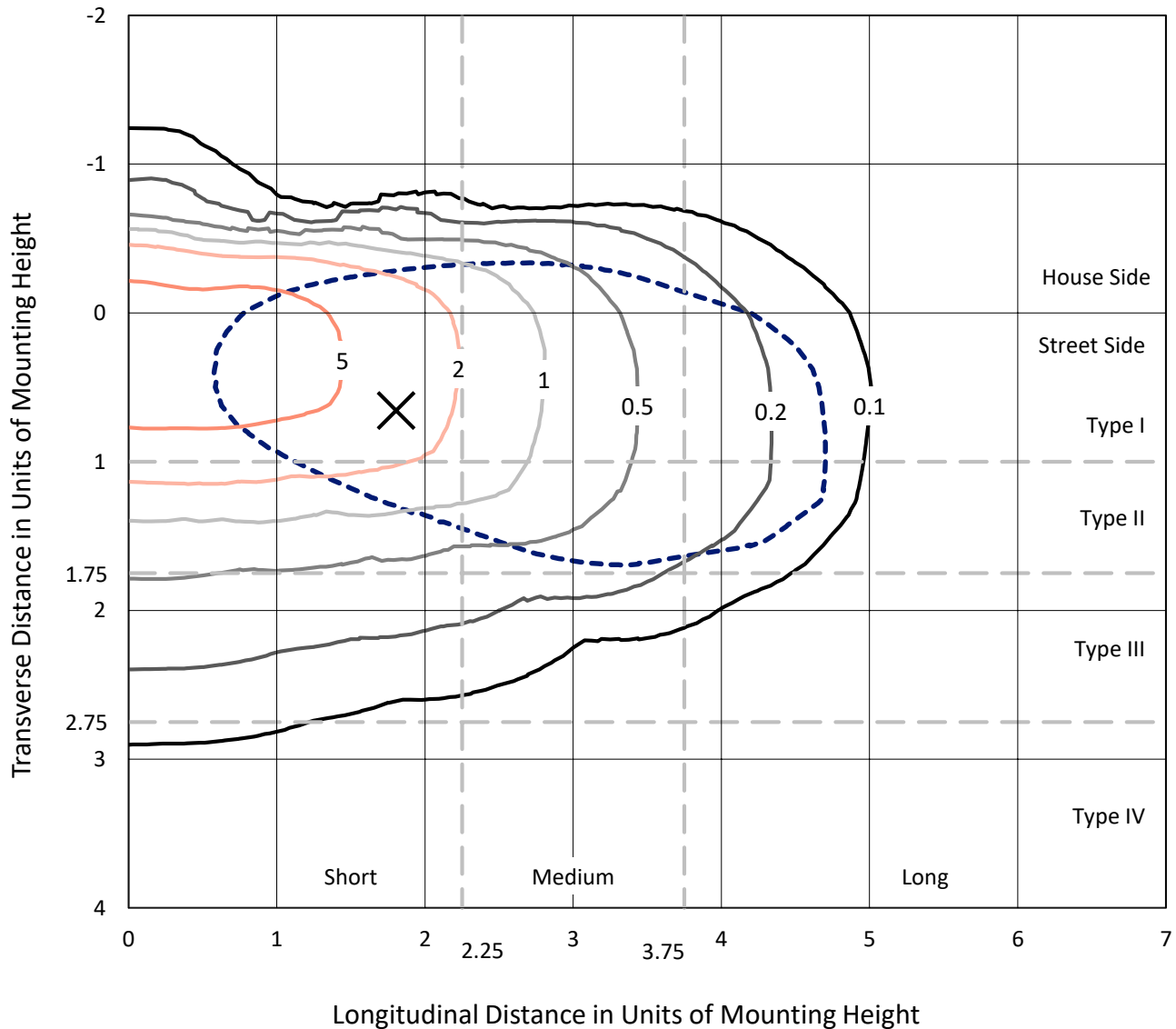
Input Watts (W): 213.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

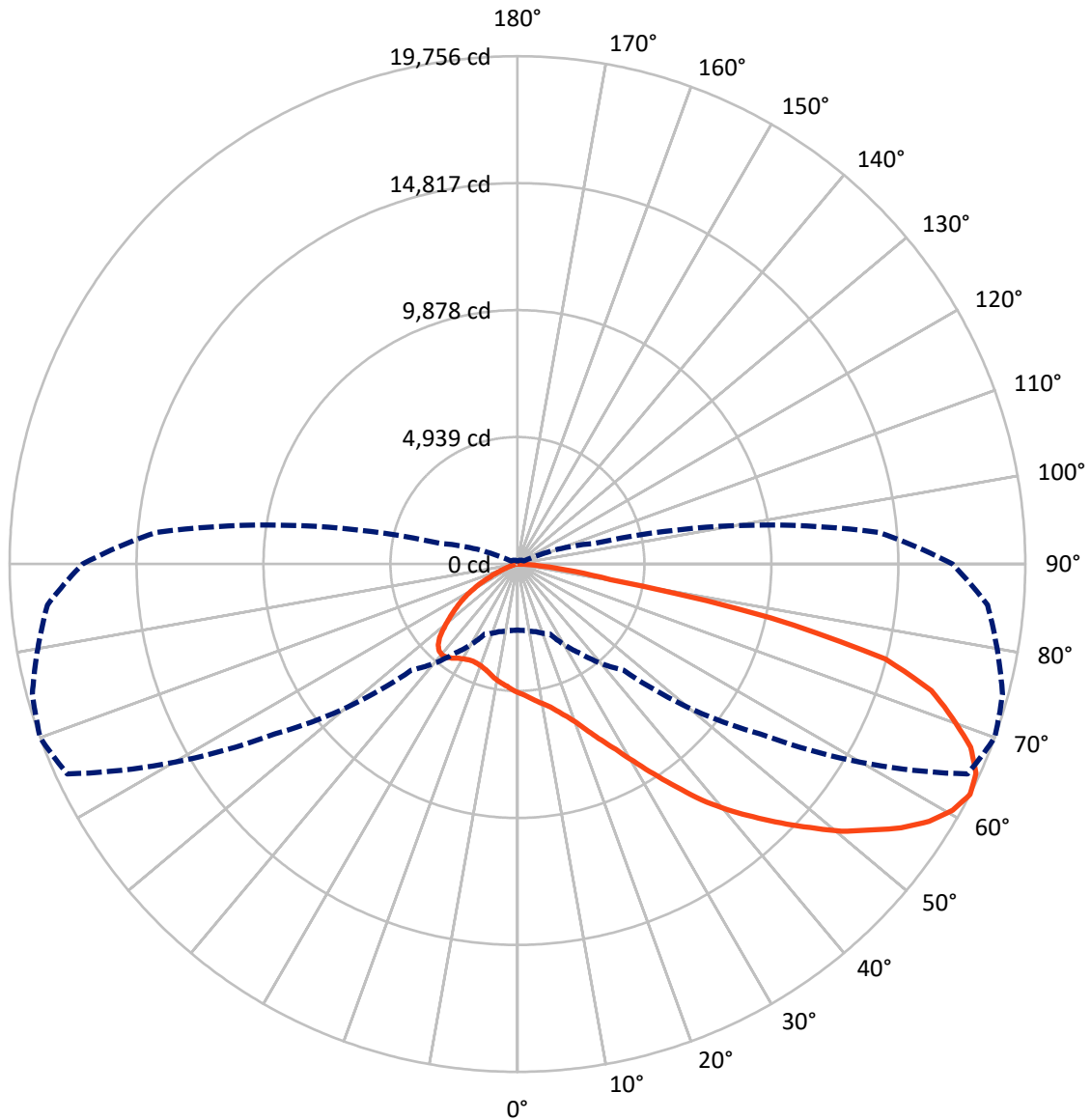
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.5 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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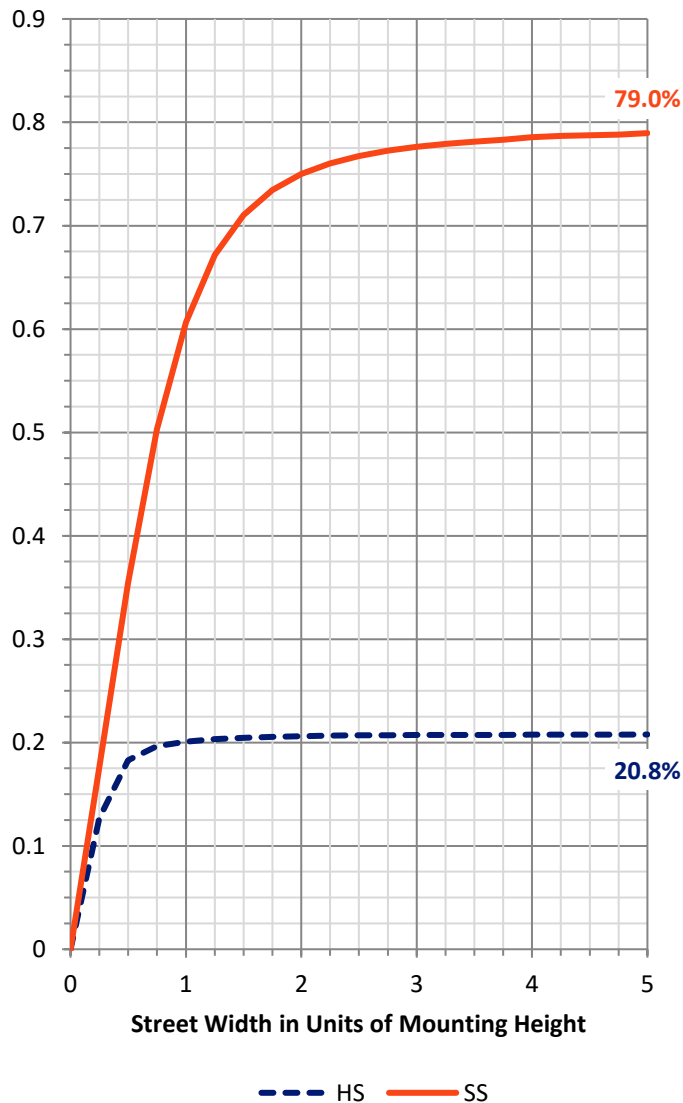
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5793.7	0.0	5793.7
	% Fixture	21.0	0.0	21.0
Street Side	Lumens	21757.3	0.0	21757.3
	% Fixture	79.0	0.0	79.0
Total	Lumens	27551.0	0.0	27551.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	475.5	1.7
10°-20°	1419.2	5.2
20°-30°	2405.9	8.7
30°-40°	3538.0	12.8
40°-50°	4711.5	17.1
50°-60°	5511.5	20.0
60°-70°	5543.2	20.1
70°-80°	3509.0	12.7
80°-90°	437.2	1.6
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°	27551.0	100.0
0°-180°	27551.0	100.0



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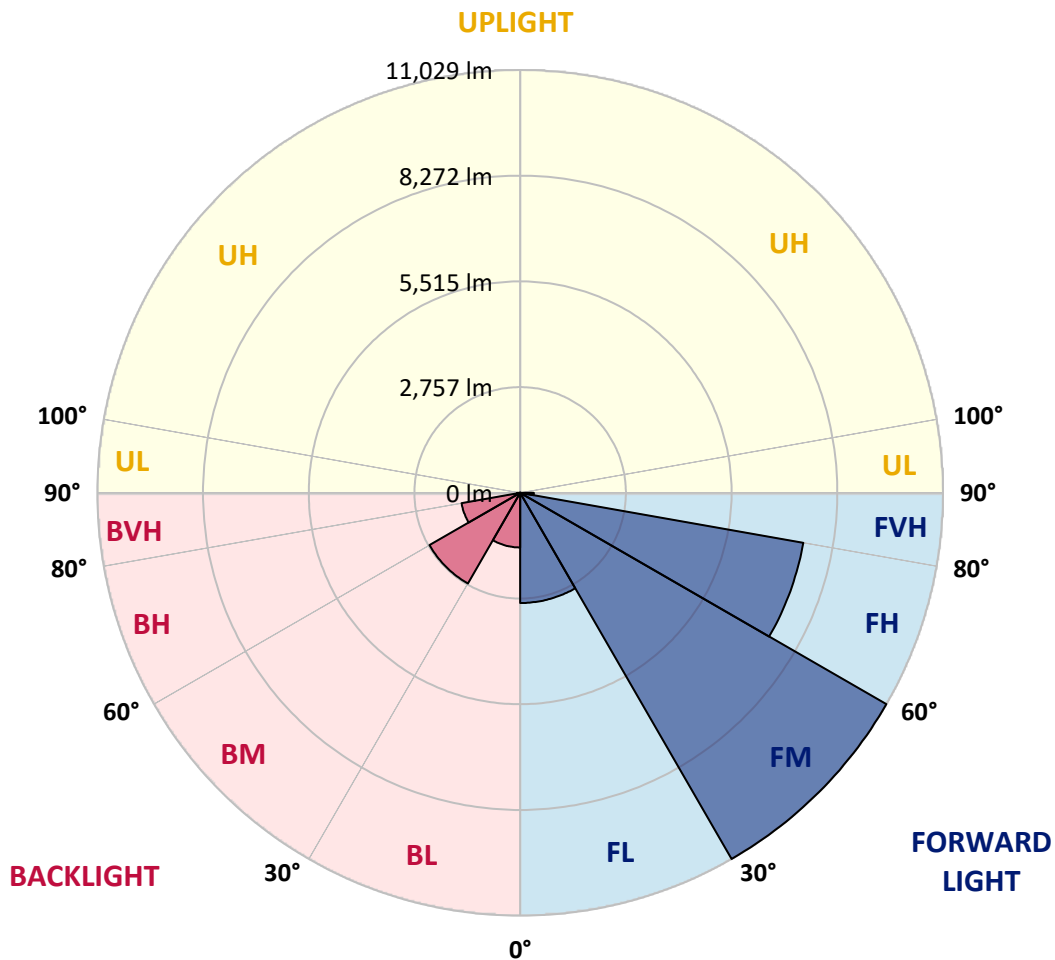
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2874.2	10.4			
FM (30°-60°)	11029.2	40.0			
FH (60°-80°)	7499.4	27.2			G3/7500
FVH (80°-90°)	354.6	1.3			G3/500
BL (0°-30°)	1426.4	5.2	B3/2500		
BM (30°-60°)	2731.8	9.9	B3/5000		
BH (60°-80°)	1552.8	5.6	B3/2500		G3/2500
BVH (80°-90°)	82.7	0.3			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 II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	5008.7	5008.7	5008.7	5008.7	5008.7	5008.7	5008.7	5008.7	5008.7	5008.7	5008.7
2.5°	5283.6	5329.8	5294.5	5280.8	5291.7	5237.3	5193.8	5131.2	5101.2	5079.5	5044.1
5°	5551.6	5627.8	5581.6	5553.0	5548.9	5449.6	5391.1	5305.3	5238.7	5180.2	5090.4
7.5°	5834.6	5879.6	5861.9	5829.2	5807.4	5686.3	5582.9	5461.8	5388.3	5310.8	5159.7
10°	6082.3	6136.7	6119.0	6060.5	6040.1	5916.3	5797.9	5633.3	5532.6	5436.0	5227.8
12.5°	6338.1	6399.3	6362.6	6304.1	6286.4	6161.2	6038.8	5838.7	5713.5	5604.7	5316.2
15°	6573.5	6629.3	6603.4	6536.8	6519.1	6412.9	6278.2	6091.8	5955.8	5811.5	5441.4
17.5°	6761.3	6817.1	6784.4	6753.1	6747.7	6642.9	6562.6	6372.1	6242.9	6046.9	5633.3
20°	6898.7	6955.9	6939.5	6954.5	7011.6	6934.1	6885.1	6724.5	6592.6	6380.3	5909.5
22.5°	7007.6	7081.0	7146.4	7176.3	7282.4	7277.0	7266.1	7170.8	7067.4	6847.0	6238.8
25°	7018.5	7102.8	7232.1	7372.2	7565.4	7658.0	7726.0	7711.0	7589.9	7372.2	6694.6
27.5°	7034.8	7121.9	7255.2	7496.1	7841.7	8058.0	8171.0	8240.4	8169.6	8024.0	7213.0
30°	6999.4	7089.2	7256.6	7564.1	8030.8	8432.2	8633.6	8890.8	8898.9	8776.5	7995.4
32.5°	6838.8	6957.2	7160.0	7572.3	8214.5	8822.7	9133.0	9626.9	9734.4	9643.2	8802.3
35°	6570.8	6678.3	6968.1	7500.1	8326.1	9147.9	9715.3	10485.5	10644.7	10639.3	9752.1
37.5°	6274.2	6383.0	6709.6	7330.1	8398.2	9437.8	10228.3	11337.3	11654.3	11587.7	10648.8
40°	5946.2	6060.5	6437.4	7116.4	8362.8	9696.3	10771.2	12163.2	12556.5	12564.6	11506.0
42.5°	5565.2	5659.1	6037.4	6821.2	8245.8	9886.8	11276.1	13032.7	13446.4	13423.2	12314.3
45°	5200.6	5298.5	5629.2	6364.0	7975.0	9992.9	11771.4	13913.1	14366.2	14292.7	13212.3
47.5°	4759.7	4899.9	5276.8	5980.2	7557.3	9984.8	12204.1	14813.9	15322.8	15262.9	13987.9
50°	3663.0	3746.0	4599.1	5584.3	6991.2	9794.3	12627.2	15698.3	16341.9	16224.9	14815.2
52.5°	3299.7	3374.5	3649.4	5109.4	6476.9	9382.0	12979.6	16710.7	17192.3	17101.2	15660.2
55°	3118.7	3159.5	3326.9	4214.1	5974.8	8712.5	13215.0	17610.1	18110.8	17909.4	16450.8
57.5°	2891.5	2941.8	3136.4	3599.0	5357.0	7685.2	13160.6	18421.1	18883.7	18574.8	17147.4
60°	2717.3	2755.4	2937.7	3239.8	4718.9	6621.1	12604.1	19217.1	19449.7	19144.9	17841.4
62.5°	2570.3	2592.1	2720.0	3007.1	4233.1	5844.2	11518.3	19323.2	19755.9	19535.5	18358.5
65°	2388.0	2393.5	2544.5	2769.0	3784.1	5377.5	10586.2	18778.9	19603.5	19530.0	18544.9
67.5°	2174.4	2185.3	2337.7	2509.1	3243.9	4880.8	9134.3	18486.4	19011.6	18965.3	18176.1
70°	1906.3	1928.1	2068.3	2198.9	2747.2	4284.8	7270.2	17329.8	17953.0	17884.9	16961.0
72.5°	1647.8	1635.6	1766.2	1895.4	2288.7	3577.3	5510.8	15339.1	16839.9	16774.6	15382.6
75°	1353.9	1345.7	1480.4	1602.9	1876.4	2890.1	3876.6	11344.1	14796.2	14997.6	13264.0
77.5°	834.1	840.9	918.5	1000.1	1270.9	2159.4	2473.7	6310.9	10051.4	11919.7	10409.3
80°	604.1	604.1	661.3	710.3	840.9	1315.8	1231.4	2631.6	3673.9	5753.0	6491.9
82.5°	391.9	375.6	410.9	453.1	468.1	570.1	563.3	1319.9	1872.3	2253.3	2703.7
85°	204.1	225.9	136.1	191.9	202.7	189.1	194.6	619.1	831.4	1065.4	1172.9
87.5°	31.3	24.5	32.7	44.9	51.7	43.5	38.1	72.1	111.6	148.3	175.5
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°	5008.7	5008.7	5008.7	5008.7	5008.7	5008.7	5008.7	5008.7	5008.7	5008.7	5008.7
2.5°	5021.0	5014.2	4951.6	4860.4	4785.6	4723.0	4682.1	4654.9	4684.9	4630.4	4623.6
5°	5034.6	4988.3	4852.2	4721.6	4620.9	4486.2	4395.0	4333.8	4358.3	4310.7	4291.6
7.5°	5071.3	4986.9	4799.2	4591.0	4400.5	4256.2	4116.1	3981.4	3961.0	3931.0	3932.4
10°	5104.0	4982.9	4737.9	4465.8	4244.0	3989.6	3820.8	3682.0	3650.7	3615.4	3597.7
12.5°	5155.7	4992.4	4661.7	4332.4	4035.8	3741.9	3559.6	3396.3	3365.0	3295.6	3280.6
15°	5259.1	5026.4	4586.9	4167.8	3801.8	3505.1	3269.7	3126.9	3069.7	2992.2	2990.8
17.5°	5393.8	5125.7	4548.8	4012.7	3603.1	3271.1	3022.1	2877.9	2781.3	2735.0	2722.7
20°	5585.6	5255.0	4547.4	3872.5	3396.3	3020.7	2735.0	2571.7	2490.1	2452.0	2428.8
22.5°	5880.9	5445.5	4571.9	3774.6	3188.1	2778.5	2494.1	2269.6	2134.9	2030.2	2045.1
25°	6248.3	5731.2	4627.7	3684.8	3007.1	2547.2	2190.7	1879.1	1638.3	1533.5	1541.7
27.5°	6715.0	6072.8	4771.9	3593.6	2801.7	2298.2	1794.8	1398.8	1216.5	1094.0	1103.5
30°	7312.4	6497.3	4961.1	3522.8	2611.2	1949.9	1351.2	1031.4	870.8	770.2	760.6
32.5°	8026.7	7112.3	5167.9	3475.2	2403.0	1514.5	974.3	756.5	600.1	542.9	551.1
35°	8911.2	7803.6	5483.6	3405.8	2046.5	1077.7	695.3	511.6	431.3	420.5	421.8
37.5°	9718.1	8511.1	5796.5	3288.8	1615.1	766.1	472.2	389.2	371.5	367.4	372.8
40°	10508.6	9156.1	6079.6	3118.7	1110.3	525.2	347.0	351.1	336.1	325.2	319.8
42.5°	11248.8	9777.9	6301.4	2805.7	759.3	347.0	307.5	319.8	317.0	295.3	285.7
45°	12047.6	10435.2	6423.8	2367.6	477.6	295.3	276.2	298.0	311.6	287.1	276.2
47.5°	12729.3	11076.0	6418.4	1813.8	323.8	278.9	259.9	278.9	295.3	277.6	268.1
50°	13515.8	11606.7	6244.2	1151.1	287.1	258.5	249.0	255.8	277.6	265.3	255.8
52.5°	14389.3	12333.3	5980.2	642.2	272.1	244.9	231.3	239.5	258.5	243.6	249.0
55°	15113.2	12936.1	5359.8	438.1	265.3	228.6	220.4	225.9	234.0	219.1	227.2
57.5°	15759.5	13434.1	4732.5	359.2	255.8	217.7	216.4	205.5	204.1	194.6	186.4
60°	16414.0	13827.4	3886.1	325.2	246.3	219.1	195.9	181.0	168.7	159.2	155.1
62.5°	16916.1	14099.5	3073.8	293.9	232.7	205.5	179.6	155.1	134.7	122.5	122.5
65°	17063.1	13978.4	2163.5	266.7	217.7	193.2	160.6	126.5	102.1	93.9	89.8
67.5°	16592.3	13283.1	1506.3	246.3	202.7	179.6	141.5	103.4	81.6	70.8	68.0
70°	15393.5	12119.7	888.5	217.7	183.7	156.5	129.3	84.4	66.7	55.8	53.1
72.5°	13621.9	10375.3	553.8	185.1	157.8	127.9	96.6	69.4	53.1	43.5	42.2
75°	11251.6	8088.0	361.9	142.9	125.2	100.7	73.5	55.8	46.3	36.7	34.0
77.5°	9022.8	5721.7	323.8	108.9	92.5	72.1	55.8	46.3	38.1	32.7	32.7
80°	5192.4	3265.7	265.3	74.8	57.1	54.4	43.5	38.1	35.4	31.3	29.9
82.5°	2551.3	1568.9	171.4	46.3	32.7	35.4	36.7	34.0	29.9	27.2	27.2
85°	879.0	522.5	69.4	29.9	21.8	21.8	23.1	24.5	23.1	21.8	21.8
87.5°	136.1	99.3	19.0	17.7	13.6	12.2	13.6	15.0	15.0	13.6	13.6
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)