

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: P510174

Luminaire Tested: **VERD-M-CA4-220-730-U-T3-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510174
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-CA4-220-730-U-T3-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 3000K, 1000mA LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28611 lumens
Efficiency: N/A
Efficacy: 128.6 lumens/watt
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G4

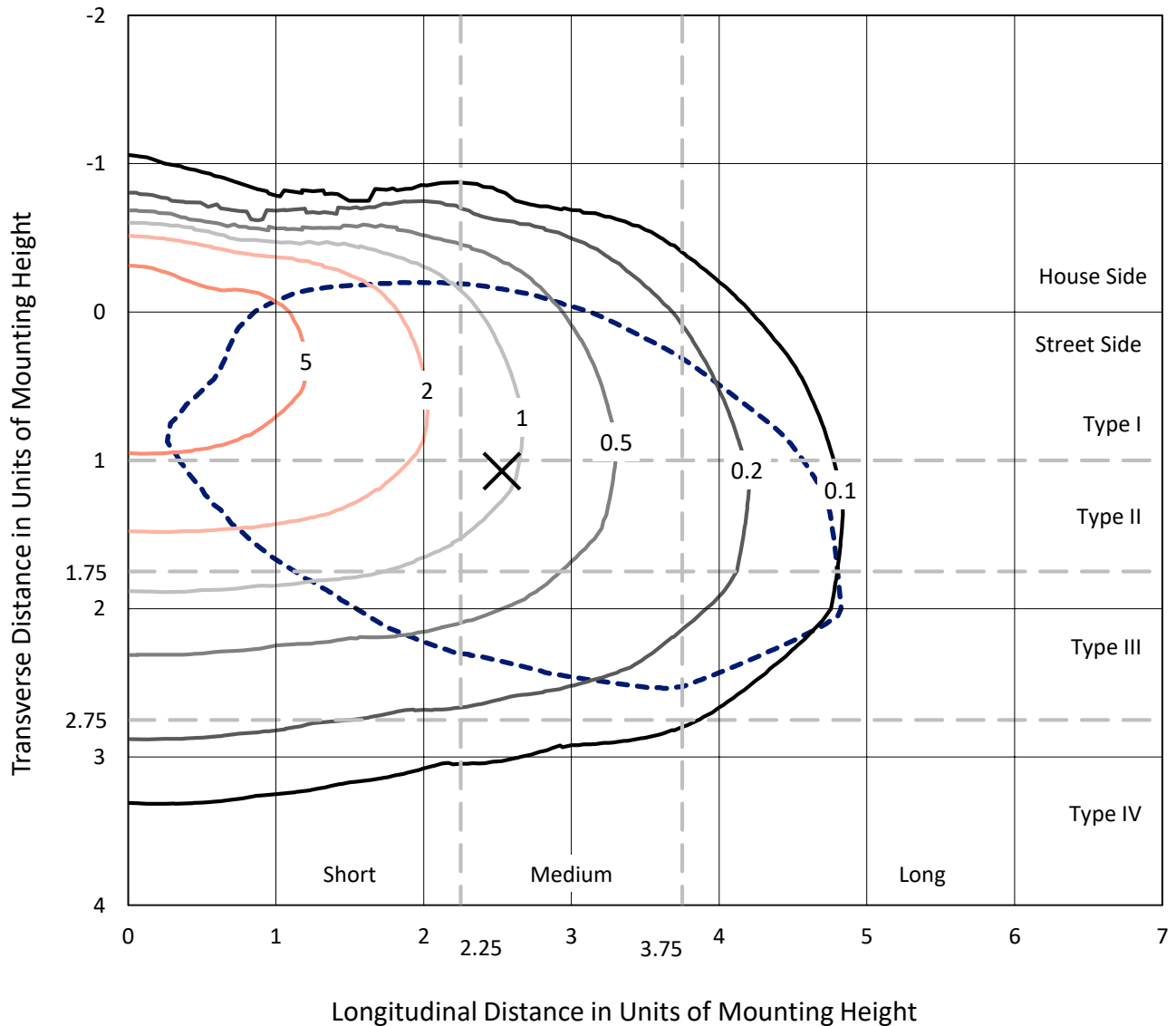
Input Watts (W): 222.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

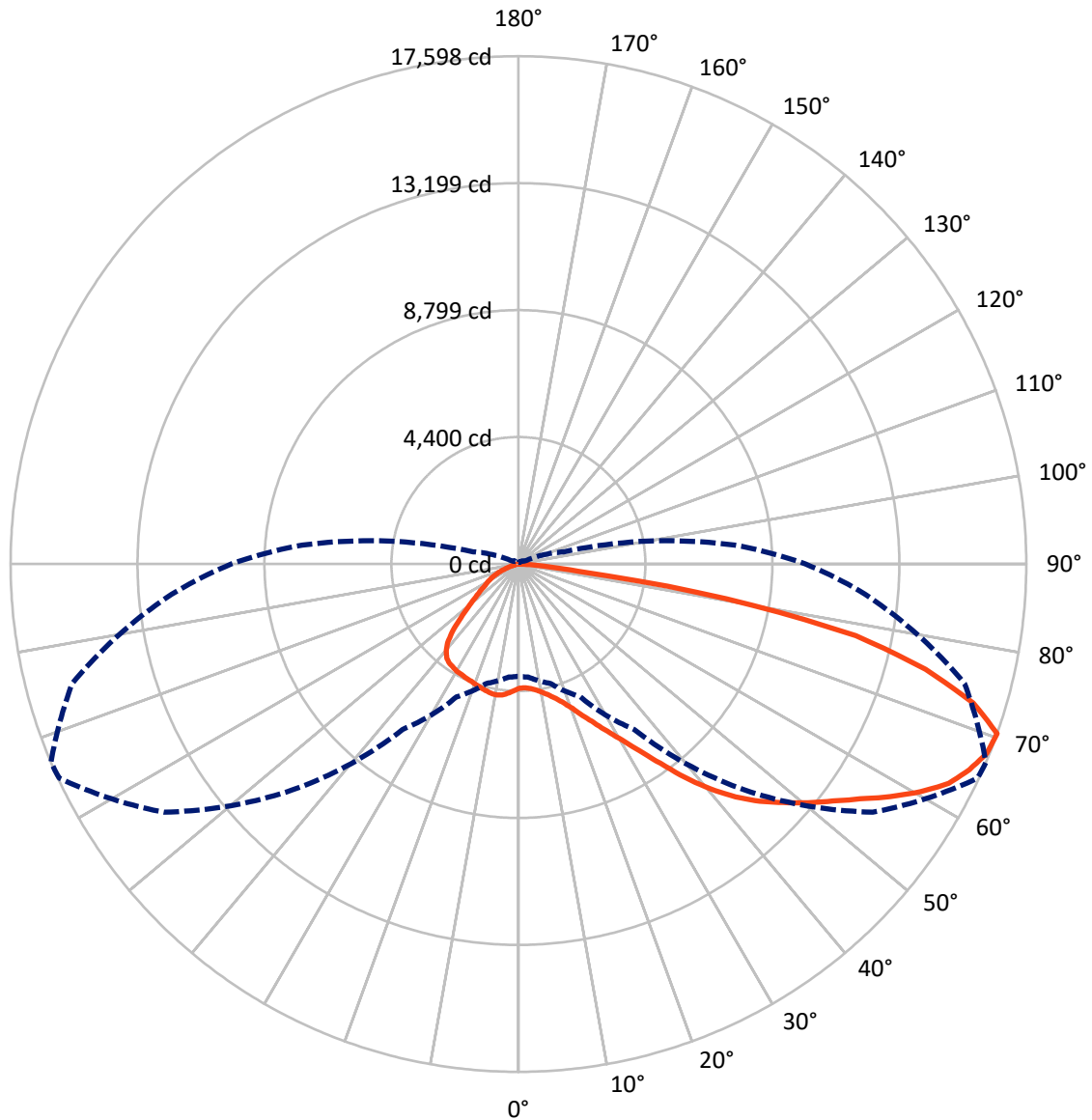
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.2 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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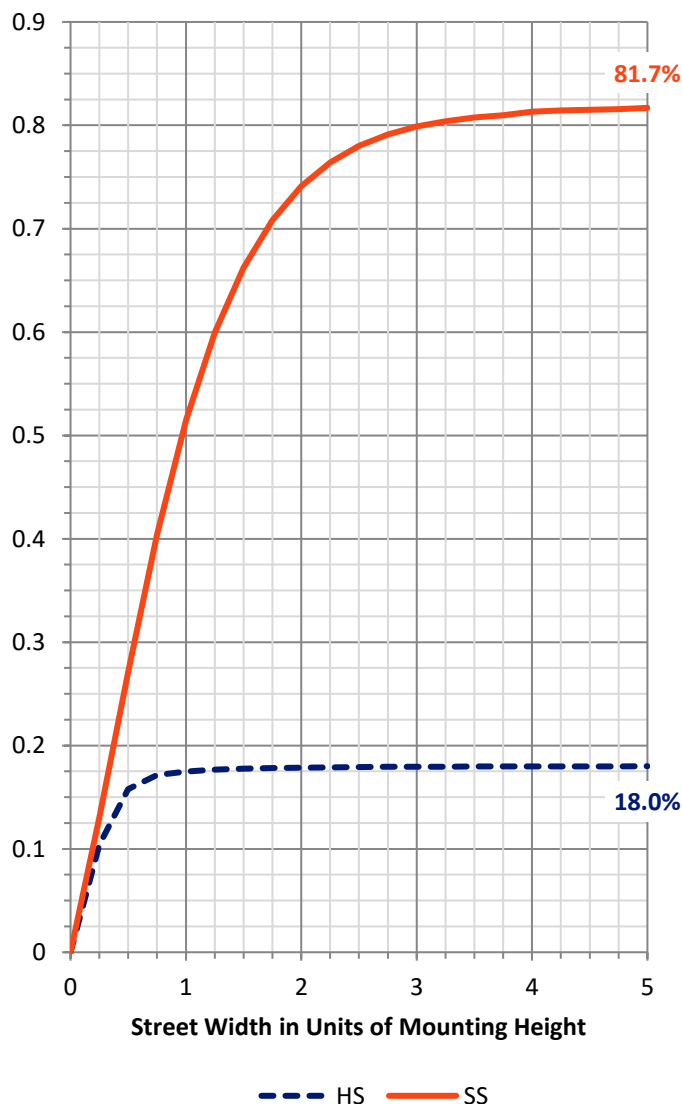
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	5213.1	0.0	5213.1
	% Fixture	18.2	0.0	18.2
Street Side	Lumens	23397.8	0.0	23397.8
	% Fixture	81.8	0.0	81.8
Total	Lumens	28611.0	0.0	28611.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	428.8	1.5
10°-20°	1337.7	4.7
20°-30°	2321.0	8.1
30°-40°	3447.2	12.0
40°-50°	4729.3	16.5
50°-60°	5807.9	20.3
60°-70°	6226.6	21.8
70°-80°	3952.8	13.8
80°-90°	359.7	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°	28611.0	100.0
0°-180°	28611.0	100.0

Coefficient of Utilization



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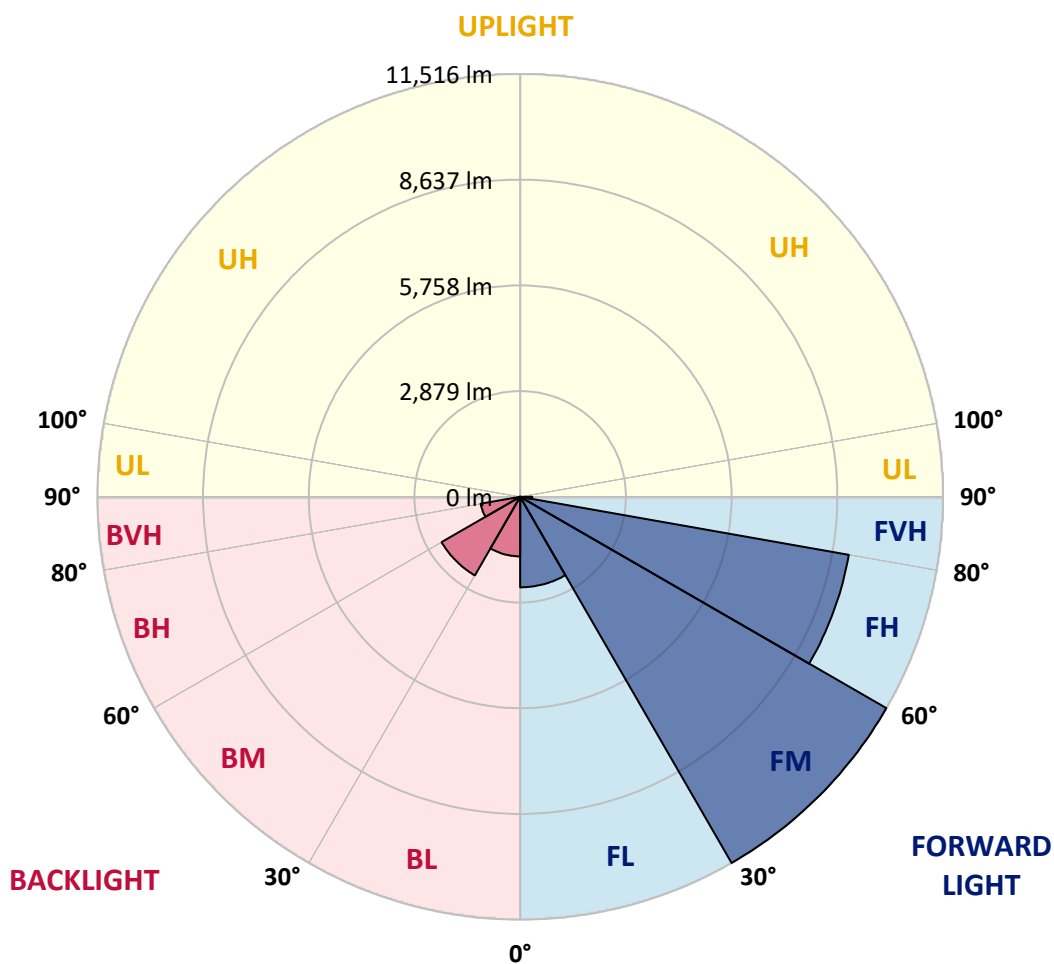
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2465.1	8.6			
FM	(30°-60°)	11515.6	40.2			
FH	(60°-80°)	9089.0	31.8			G4/12000
FVH	(80°-90°)	328.1	1.1			G3/500
BL	(0°-30°)	1622.4	5.7	B3/2500		
BM	(30°-60°)	2468.7	8.6	B2/2500		
BH	(60°-80°)	1090.4	3.8	B3/2500		G3/2500
BVH	(80°-90°)	31.6	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-G4

Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	4303.7	4303.7	4303.7	4303.7	4303.7	4303.7	4303.7	4303.7	4303.7	4303.7	4303.7
2.5°	4265.0	4305.1	4281.6	4278.8	4306.5	4280.2	4298.2	4294.0	4291.3	4295.4	4324.5
5°	4377.1	4424.2	4392.3	4382.6	4397.9	4350.8	4346.7	4337.0	4334.2	4335.6	4377.1
7.5°	4533.5	4588.9	4576.4	4551.5	4543.2	4465.7	4451.9	4417.2	4406.2	4408.9	4450.5
10°	4779.9	4835.3	4810.4	4755.0	4720.4	4631.8	4582.0	4537.7	4515.5	4518.3	4562.6
12.5°	5095.5	5148.2	5106.6	5005.6	4986.2	4843.6	4766.1	4672.0	4656.7	4634.6	4681.6
15°	5393.2	5438.9	5419.5	5325.3	5272.7	5103.9	4961.3	4845.0	4831.1	4810.4	4809.0
17.5°	5722.6	5768.3	5732.3	5663.1	5593.9	5393.2	5239.5	5090.0	5054.0	5036.0	4971.0
20°	6074.2	6146.2	6139.3	6082.5	5999.5	5764.2	5546.8	5377.9	5339.2	5306.0	5168.9
22.5°	6436.9	6531.1	6510.3	6479.8	6445.2	6180.8	5927.5	5732.3	5703.2	5632.7	5416.7
25°	6838.4	6903.4	6888.2	6903.4	6879.9	6645.9	6369.1	6131.0	6092.2	6025.8	5694.9
27.5°	7227.3	7295.2	7321.5	7289.6	7304.9	7137.4	6809.3	6596.1	6558.7	6436.9	6029.9
30°	7579.0	7663.4	7700.8	7714.6	7765.8	7592.8	7350.5	7091.7	7079.2	6954.6	6471.5
32.5°	7860.0	7954.1	8045.5	8105.0	8186.7	8110.5	7869.7	7713.2	7714.6	7602.5	7134.6
35°	8063.5	8171.4	8304.3	8462.1	8633.8	8601.9	8459.4	8462.1	8484.3	8521.7	7980.4
37.5°	8289.1	8376.3	8532.7	8752.8	9014.5	9080.9	9061.5	9281.6	9389.6	9456.0	8723.8
40°	8423.4	8512.0	8707.1	9003.4	9384.1	9543.3	9721.8	10108.0	10249.2	10180.0	9359.1
42.5°	8275.2	8354.2	8693.3	9205.5	9687.2	10048.5	10368.3	10933.1	11035.5	10809.9	9894.9
45°	8082.8	8185.3	8542.4	9260.9	9955.8	10544.1	11041.0	11651.5	11727.7	11407.9	10368.3
47.5°	7925.0	8015.0	8431.7	9201.3	10203.6	11052.1	11632.1	12329.8	12349.2	11954.7	10858.3
50°	7722.9	7832.3	8266.9	9128.0	10353.1	11502.0	12173.4	12962.4	13005.3	12520.8	11273.6
52.5°	7511.1	7617.7	8067.6	9007.5	10461.0	11875.8	12735.4	13635.2	13639.3	13120.2	11716.6
55°	7198.3	7311.8	7810.1	8833.1	10494.3	12123.6	13300.2	14321.8	14364.7	13727.9	12118.0
57.5°	6867.4	6964.3	7500.0	8561.8	10371.1	12357.5	13880.2	15084.5	15202.2	14413.2	12462.7
60°	6428.6	6525.5	7091.7	8206.0	10109.4	12620.5	14544.7	16003.7	16016.2	14968.3	12713.3
62.5°	5956.6	6041.0	6561.5	7648.2	9703.8	12721.6	15115.0	16738.8	16737.4	15462.4	12837.8
65°	5395.9	5430.5	5960.7	6962.9	9074.0	12573.4	15366.9	17223.3	17176.2	15818.2	12796.3
67.5°	4731.5	4768.9	5170.3	6111.6	8160.4	11994.8	15254.8	17457.2	17504.3	16135.2	12616.4
70°	3889.8	3934.1	4284.4	5078.9	6996.2	11071.5	14991.8	17558.3	17598.4	16007.9	12061.3
72.5°	2871.0	2930.5	3145.1	3780.5	5310.1	9302.4	13773.6	16452.2	16474.4	14944.7	10905.4
75°	1783.0	1892.3	2094.4	2512.5	3445.5	6524.1	11773.3	14708.0	14569.6	13330.7	9024.1
77.5°	712.9	730.9	832.0	1176.6	1680.5	3397.0	8534.1	11691.7	11956.1	10665.9	6454.9
80°	415.3	412.5	436.0	548.2	721.2	1161.4	3319.5	6558.7	7310.4	5858.3	2904.2
82.5°	335.0	322.5	322.5	351.6	346.1	488.7	1088.0	1915.8	2101.3	1864.6	826.4
85°	175.8	171.7	139.8	173.0	173.0	243.6	418.1	542.6	573.1	499.7	310.1
87.5°	44.3	44.3	44.3	54.0	42.9	51.2	70.6	85.8	88.6	72.0	45.7
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°	4303.7	4303.7	4303.7	4303.7	4303.7	4303.7	4303.7	4303.7	4303.7	4303.7	4303.7
2.5°	4335.6	4348.0	4396.5	4389.6	4397.9	4397.9	4411.7	4426.9	4472.6	4446.3	4435.2
5°	4385.4	4410.3	4471.2	4493.4	4526.6	4530.8	4558.4	4568.1	4618.0	4590.3	4590.3
7.5°	4480.9	4510.0	4566.8	4575.1	4590.3	4564.0	4570.9	4540.5	4573.7	4540.5	4541.8
10°	4588.9	4608.3	4647.0	4591.7	4568.1	4505.8	4492.0	4417.2	4443.6	4400.6	4389.6
12.5°	4692.7	4685.8	4656.7	4558.4	4493.4	4390.9	4348.0	4247.0	4241.4	4184.7	4173.6
15°	4791.0	4742.6	4648.4	4496.2	4385.4	4242.8	4140.4	4029.6	3990.9	3925.8	3920.3
17.5°	4911.4	4828.4	4660.9	4436.6	4255.3	4047.6	3902.3	3777.7	3697.4	3637.9	3636.5
20°	5058.2	4930.8	4666.4	4368.8	4121.0	3855.2	3651.7	3493.9	3379.0	3304.3	3302.9
22.5°	5242.3	5069.2	4717.6	4291.3	3949.4	3622.7	3369.3	3096.6	2938.8	2786.6	2758.9
25°	5458.2	5209.1	4761.9	4251.1	3780.5	3380.4	3003.9	2605.2	2360.2	2238.4	2192.7
27.5°	5761.4	5441.6	4827.0	4175.0	3621.3	3081.4	2533.2	2098.6	1803.7	1699.9	1699.9
30°	6111.6	5735.1	4948.8	4129.3	3399.8	2662.0	2016.9	1550.4	1276.3	1119.9	1115.7
32.5°	6645.9	6085.3	5059.6	4031.0	3131.2	2205.2	1459.0	999.5	779.4	682.5	676.9
35°	7414.2	6752.5	5238.1	3932.7	2742.3	1641.8	926.1	573.1	444.4	389.0	386.2
37.5°	8153.4	7387.9	5623.0	3737.6	2189.9	1031.3	513.6	330.8	271.3	264.4	261.6
40°	8673.9	7936.1	5894.3	3439.9	1555.9	546.8	297.6	239.5	235.3	232.6	231.2
42.5°	9241.5	8343.1	6086.7	3060.7	923.3	317.0	242.2	215.9	209.0	206.3	206.3
45°	9702.4	8734.8	6122.7	2518.0	465.1	261.6	221.5	196.6	188.3	193.8	195.2
47.5°	10127.4	9104.4	6000.9	1893.7	314.2	243.6	207.6	182.7	177.2	191.0	191.0
50°	10490.1	9417.3	5721.2	1413.4	294.9	229.8	193.8	168.9	167.5	180.0	181.3
52.5°	10851.4	9669.2	5281.0	1067.3	279.6	214.6	180.0	156.4	152.3	160.6	162.0
55°	11137.9	9759.2	4954.4	794.6	268.6	200.7	167.5	144.0	134.3	132.9	135.7
57.5°	11295.8	9680.3	4634.6	584.2	256.1	188.3	155.0	127.4	112.1	112.1	112.1
60°	11298.5	9584.8	4292.7	462.4	242.2	174.4	141.2	109.4	94.1	91.4	91.4
62.5°	11268.1	9414.5	3795.7	401.4	227.0	163.3	123.2	92.7	81.7	77.5	77.5
65°	11133.8	9093.4	3193.5	343.3	209.0	155.0	105.2	83.1	73.4	67.8	67.8
67.5°	10715.7	8491.2	2458.5	299.0	192.4	137.0	95.5	74.8	65.1	59.5	58.1
70°	9948.8	7518.0	1622.4	254.7	175.8	121.8	87.2	67.8	58.1	52.6	51.2
72.5°	8662.8	6118.5	815.3	215.9	150.9	112.1	78.9	59.5	49.8	44.3	44.3
75°	6788.5	4247.0	444.4	171.7	119.0	98.3	69.2	49.8	42.9	38.8	38.8
77.5°	4162.5	2105.5	303.2	132.9	90.0	80.3	55.4	41.5	37.4	36.0	36.0
80°	1518.6	689.4	203.5	94.1	67.8	62.3	44.3	36.0	34.6	34.6	34.6
82.5°	548.2	350.2	137.0	63.7	42.9	47.1	36.0	30.5	29.1	30.5	31.8
85°	225.6	153.7	49.8	36.0	23.5	24.9	22.1	20.8	22.1	23.5	23.5
87.5°	34.6	30.5	18.0	18.0	13.8	12.5	9.7	11.1	13.8	16.6	16.6
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)