

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: P510193

Luminaire Tested: **VERD-M-CA4-220-750-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510193
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-CA4-220-750-U-T4
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 5000K, 1000mA LEDS AND TYPE IV OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31721 lumens
Efficiency: N/A
Efficacy: 142.6 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

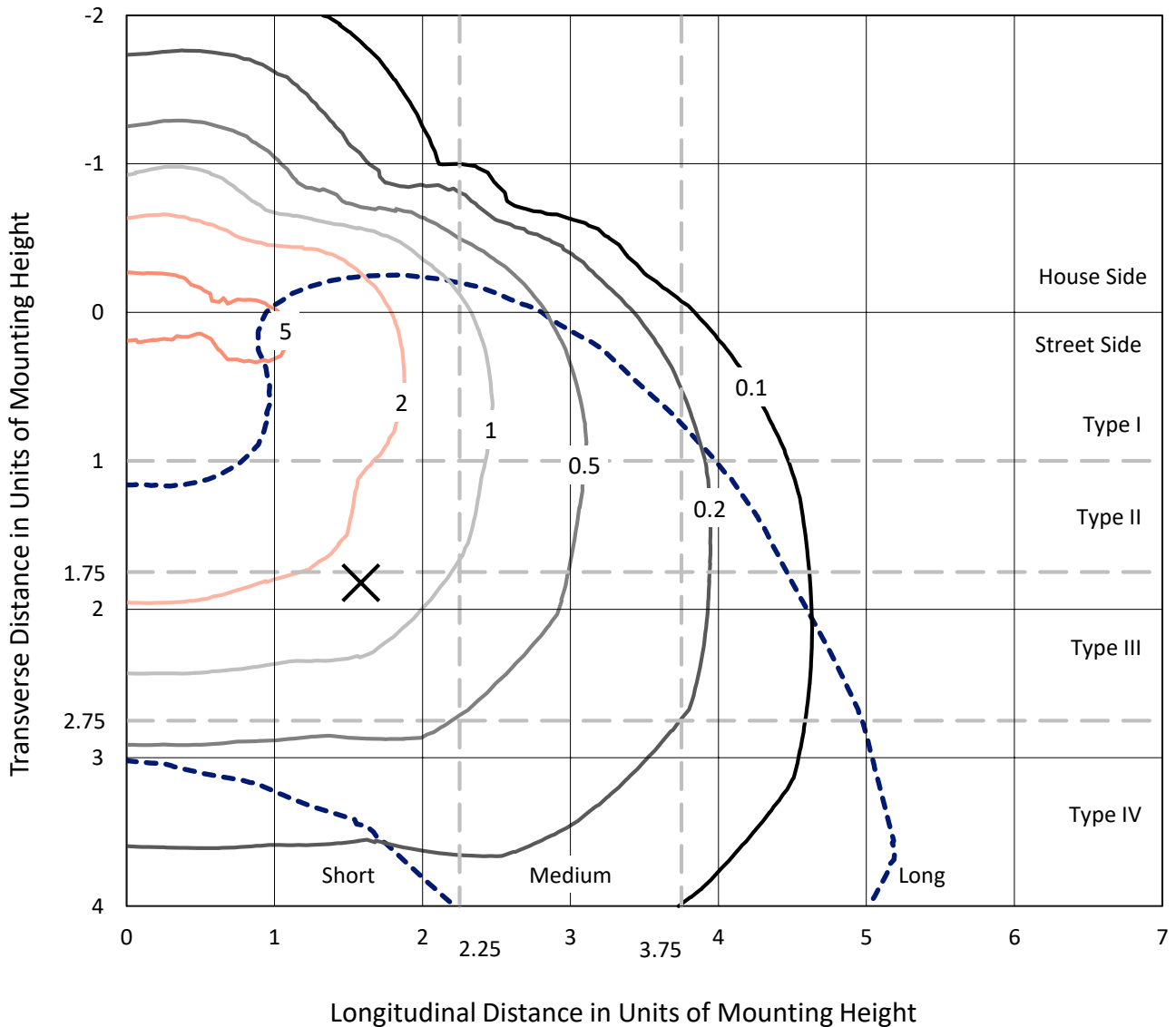
Input Watts (W): 222.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

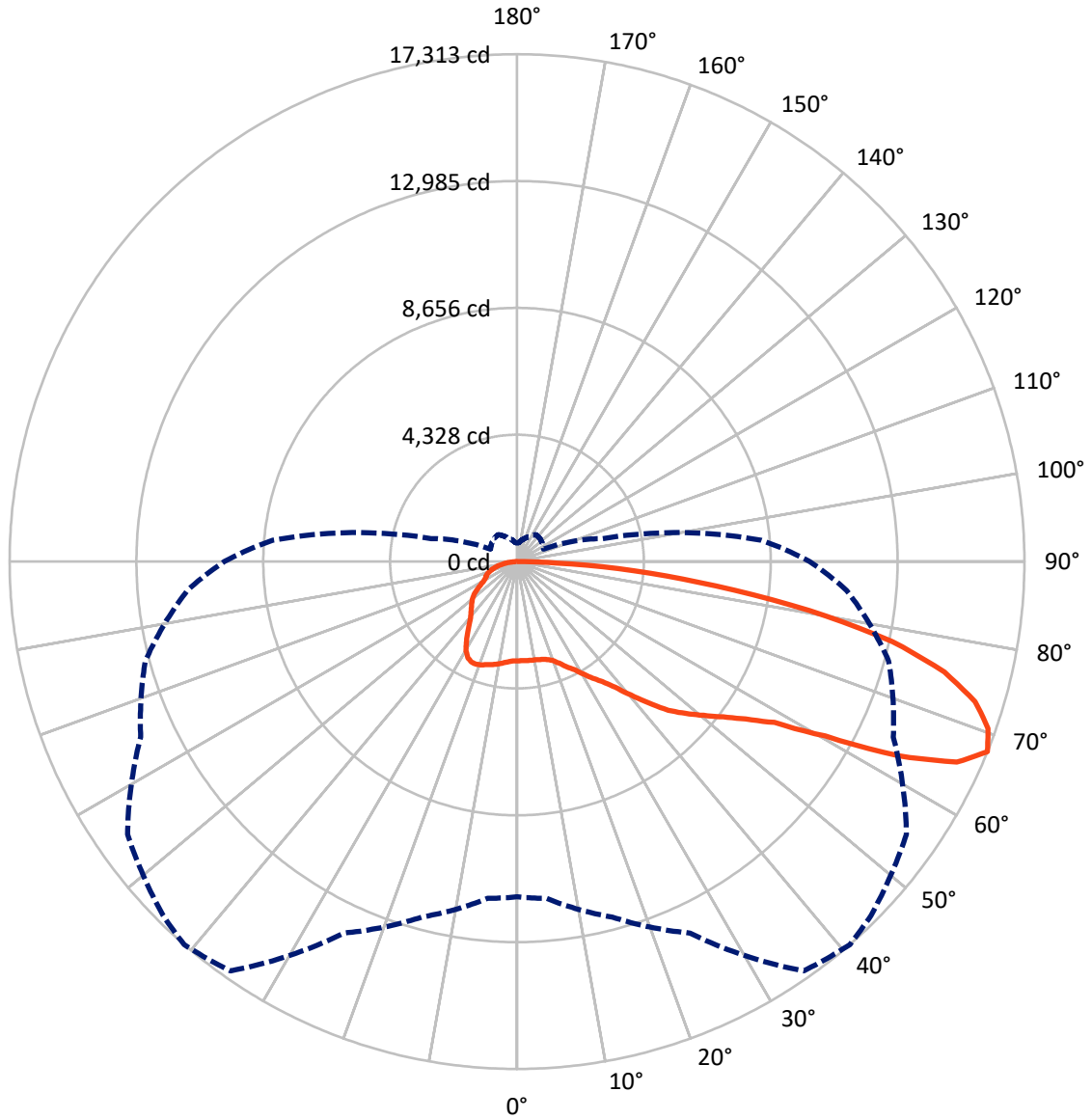
× Max cd
 - - - 1/2 Max cd



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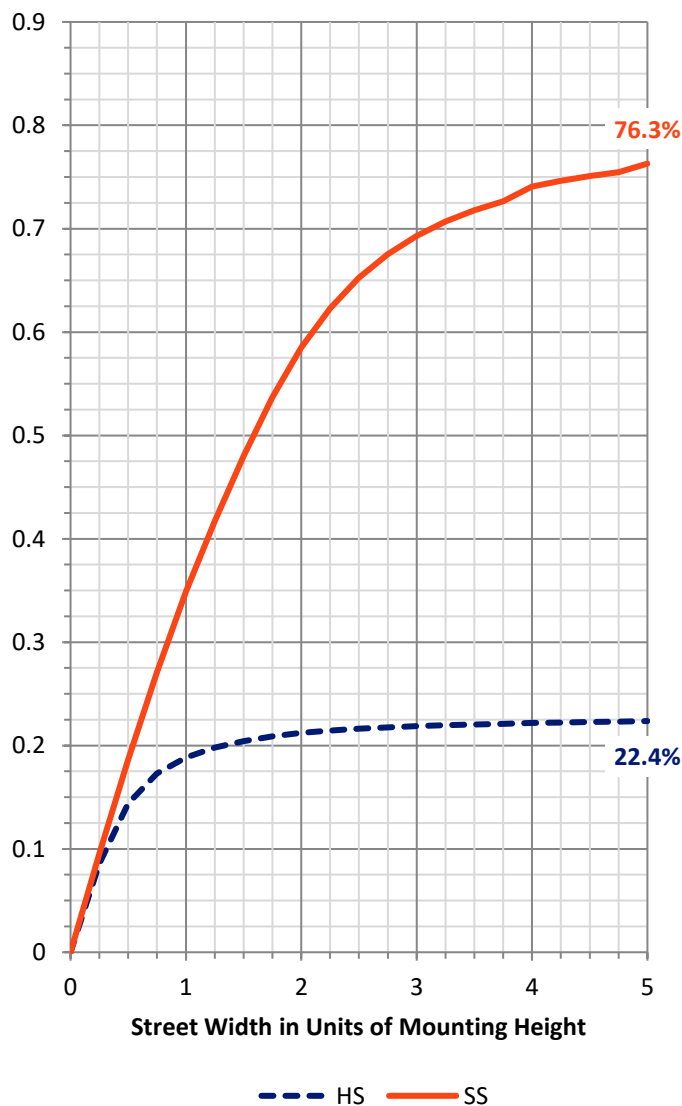
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7178.3	0.0	7178.3
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	24542.7	0.0	24542.7
	% Fixture	77.4	0.0	77.4
Total	Lumens	31721.0	0.0	31721.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	327.3	1.0
10°-20°	1015.0	3.2
20°-30°	1815.1	5.7
30°-40°	2846.1	9.0
40°-50°	4413.4	13.9
50°-60°	6221.8	19.6
60°-70°	7931.4	25.0
70°-80°	5935.3	18.7
80°-90°	1215.6	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°	31721.0	100.0
0°-180°	31721.0	100.0

Coefficient of Utilization



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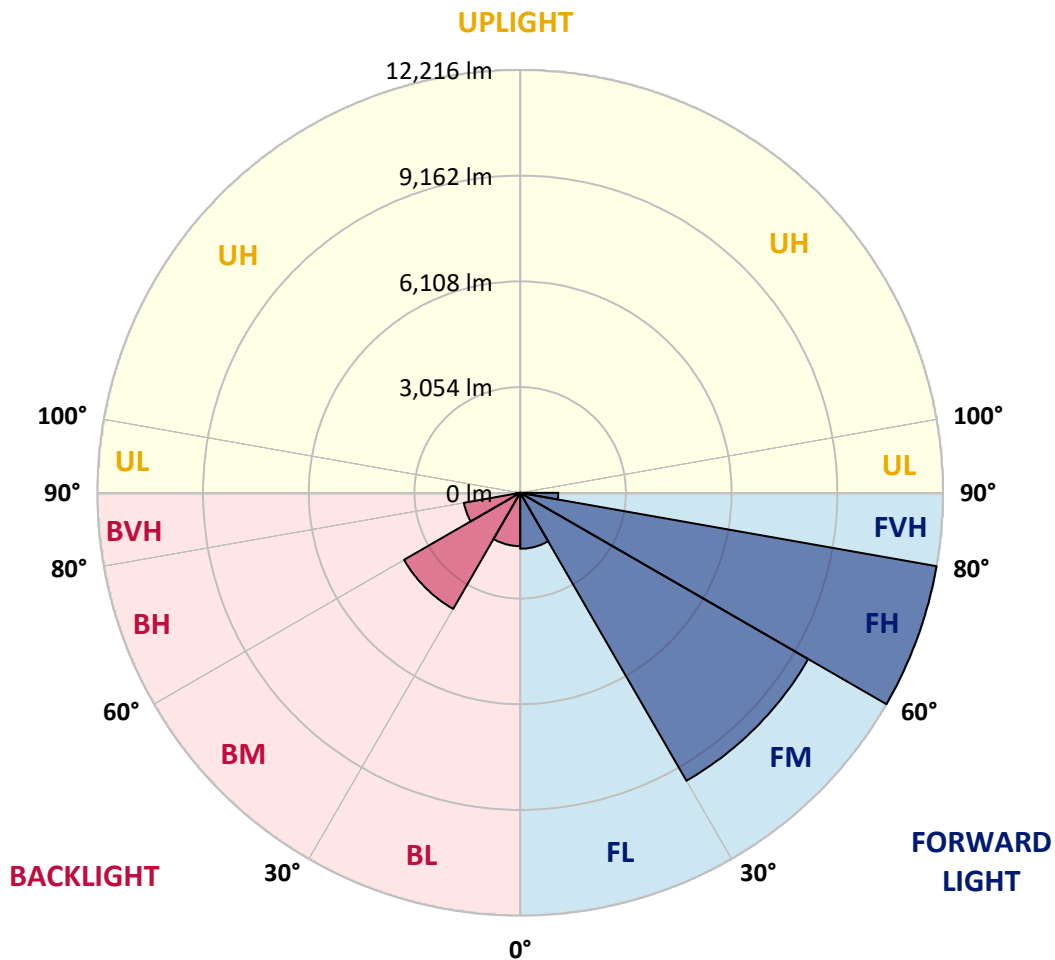
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1616.2	5.1			
FM	(30°-60°)	9608.0	30.3			
FH	(60°-80°)	12216.4	38.5			G5
FVH	(80°-90°)	1102.1	3.5			G5
BL	(0°-30°)	1541.1	4.9	B3/2500		
BM	(30°-60°)	3873.3	12.2	B3/5000		
BH	(60°-80°)	1650.3	5.2	B3/2500		G3/2500
BVH	(80°-90°)	113.6	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°	3386.8	3386.8	3386.8	3386.8	3386.8	3386.8	3386.8	3386.8	3386.8	3386.8	3386.8
2.5°	3345.1	3383.9	3378.1	3371.0	3382.5	3383.9	3350.9	3363.8	3371.0	3382.5	3401.1
5°	3353.7	3392.5	3389.6	3376.7	3385.3	3389.6	3359.5	3382.5	3382.5	3386.8	3408.3
7.5°	3335.1	3372.4	3372.4	3368.1	3386.8	3404.0	3376.7	3396.8	3408.3	3419.8	3434.1
10°	3317.9	3349.4	3360.9	3358.1	3401.1	3405.4	3386.8	3435.6	3454.2	3465.7	3483.0
12.5°	3299.2	3338.0	3353.7	3369.5	3415.5	3431.3	3421.2	3471.5	3510.2	3530.3	3549.0
15°	3290.6	3333.6	3359.5	3382.5	3432.7	3461.4	3461.4	3537.5	3583.5	3609.3	3642.3
17.5°	3350.9	3395.4	3415.5	3434.1	3480.1	3518.8	3516.0	3605.0	3672.5	3712.7	3773.0
20°	3500.2	3553.3	3564.8	3572.0	3600.7	3615.0	3610.7	3706.9	3800.2	3876.3	3943.8
22.5°	3760.0	3791.6	3797.4	3768.7	3775.8	3787.3	3780.1	3833.3	3939.5	4028.5	4149.1
25°	3972.5	4022.8	4008.4	3966.8	3972.5	3988.3	3966.8	4048.6	4124.7	4241.0	4363.0
27.5°	4196.5	4233.8	4218.0	4192.2	4186.4	4175.0	4170.6	4275.4	4387.4	4479.3	4660.2
30°	4469.3	4489.4	4443.4	4431.9	4442.0	4449.2	4421.9	4555.4	4657.3	4789.4	5033.5
32.5°	4928.7	4947.3	4881.3	4704.7	4709.0	4742.0	4719.1	4887.0	5079.4	5240.2	5488.6
35°	5514.4	5514.4	5462.8	5214.4	5026.3	5027.7	5033.5	5270.4	5627.9	5988.2	6243.8
37.5°	6107.4	6127.5	6029.8	5803.0	5564.7	5438.3	5332.1	5636.5	6104.5	6908.5	7288.9
40°	6724.7	6756.3	6609.9	6401.7	6127.5	5983.9	5860.4	6045.6	6677.3	7820.1	8121.6
42.5°	7264.5	7309.0	7158.3	6938.6	6747.7	6585.5	6398.8	6473.5	7307.6	8685.8	8856.7
45°	7767.0	7791.4	7663.6	7482.8	7324.8	7235.8	7105.2	7191.3	8028.3	9532.9	9501.3
47.5°	8137.4	8173.3	8057.0	7959.4	7797.2	7744.0	7742.6	7979.5	8839.5	10207.7	10061.2
50°	8739.0	8711.7	8450.4	8331.2	8232.2	8249.4	8291.0	8700.2	9792.8	10858.0	10532.1
52.5°	9748.3	9698.0	9118.0	8869.6	8747.6	8803.6	8825.1	9353.4	10754.7	11419.4	10921.2
55°	11053.3	10892.5	10470.4	9804.2	9420.9	9474.0	9449.6	10055.5	11524.2	11954.9	11209.8
57.5°	11916.1	12066.9	11864.4	11484.0	10532.1	10358.4	10301.0	10750.4	12236.3	12467.4	11508.4
60°	12665.5	12915.4	13236.9	12992.9	12735.9	12085.5	11550.0	11540.0	12863.7	12809.1	11629.0
62.5°	13456.6	13588.7	14084.0	14234.7	14711.4	14592.2	13874.4	12539.2	13491.1	13058.9	11699.3
65°	12656.9	12833.5	13735.1	14557.8	16322.2	16494.5	16260.5	14397.0	13926.1	13186.7	11598.8
67.5°	11439.5	11537.1	12557.9	13984.9	17051.5	17312.8	17077.4	16220.3	14167.3	13130.7	11288.7
70°	9878.9	9993.8	10968.6	12915.4	17014.2	17048.7	16956.8	16388.3	14071.1	12868.0	10507.7
72.5°	8009.6	8154.6	9011.7	11033.2	16198.8	16348.1	16203.1	16055.2	13801.2	12132.9	9162.5
75°	6060.0	6252.4	7017.6	8796.4	14315.1	15067.4	15086.1	15542.6	12753.1	10401.5	6650.1
77.5°	4133.3	4317.1	5042.1	6701.7	11883.1	13084.8	13397.7	13897.4	10655.6	7686.6	3628.0
80°	2327.2	2310.0	3230.3	4788.0	9063.4	10118.7	10512.0	10491.9	7482.8	3946.7	739.4
82.5°	1075.3	1078.2	1652.5	3056.6	6136.1	6832.4	6991.8	6085.8	2625.9	669.0	235.5
85°	535.5	541.3	795.4	1533.3	3464.3	4002.7	3804.5	2532.5	562.8	195.3	140.7
87.5°	212.5	203.9	314.4	630.3	1250.5	1325.1	1157.2	506.8	101.9	68.9	47.4
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°	3386.8	3386.8	3386.8	3386.8	3386.8	3386.8	3386.8	3386.8	3386.8	3386.8	3386.8
2.5°	3396.8	3399.7	3412.6	3386.8	3393.9	3388.2	3383.9	3406.9	3405.4	3409.7	3402.6
5°	3406.9	3414.0	3427.0	3415.5	3427.0	3421.2	3425.5	3457.1	3461.4	3460.0	3460.0
7.5°	3434.1	3441.3	3465.7	3451.4	3477.2	3470.0	3471.5	3501.6	3507.4	3498.7	3495.9
10°	3491.6	3497.3	3531.8	3528.9	3538.9	3533.2	3527.5	3540.4	3537.5	3524.6	3518.8
12.5°	3557.6	3573.4	3612.2	3613.6	3626.5	3597.8	3567.7	3563.4	3554.7	3534.6	3530.3
15°	3656.7	3675.3	3734.2	3719.8	3711.2	3649.5	3599.2	3559.0	3524.6	3507.4	3491.6
17.5°	3798.8	3830.4	3912.2	3867.7	3804.5	3714.1	3626.5	3538.9	3465.7	3404.0	3379.6
20°	3979.7	4015.6	4084.5	4025.6	3929.4	3794.5	3652.4	3494.4	3335.1	3198.7	3178.6
22.5°	4195.1	4252.5	4302.7	4167.8	4025.6	3854.8	3652.4	3425.5	3161.4	2957.5	2907.2
25°	4446.3	4490.8	4475.0	4285.5	4080.2	3864.8	3612.2	3303.5	2930.2	2693.3	2653.1
27.5°	4719.1	4739.2	4617.1	4341.5	4085.9	3806.0	3498.7	3086.7	2660.3	2473.7	2434.9
30°	5055.0	4994.7	4762.1	4375.9	4028.5	3675.3	3296.3	2769.4	2440.7	2277.0	2232.5
32.5°	5416.8	5306.3	4865.5	4351.5	3902.2	3457.1	2983.3	2545.5	2294.2	2094.7	2057.3
35°	6105.9	5791.5	5016.3	4278.3	3682.5	3165.7	2680.4	2373.2	2139.2	1925.2	1890.8
37.5°	7036.3	6489.3	5227.3	4176.4	3422.7	2882.8	2455.0	2189.4	1987.0	1765.9	1711.3
40°	7759.8	7194.2	5566.1	4067.3	3182.9	2614.4	2291.3	2093.2	1886.5	1651.0	1603.7
42.5°	8449.0	7838.8	5982.5	3945.2	2936.0	2427.7	2219.6	2071.7	1859.2	1619.4	1574.9
45°	9057.7	8360.0	6341.4	3823.2	2657.4	2255.4	2166.4	2030.0	1820.4	1579.2	1536.2
47.5°	9550.1	8807.9	6652.9	3691.1	2404.8	2124.8	2097.5	1954.0	1745.8	1497.4	1445.7
50°	9995.2	9186.9	6868.3	3550.4	2157.8	2018.6	1984.1	1814.7	1597.9	1378.3	1345.2
52.5°	10269.4	9443.9	6997.5	3573.4	1923.8	1899.4	1843.4	1669.7	1468.7	1280.6	1237.6
55°	10556.5	9686.5	6996.1	3444.2	1728.6	1719.9	1666.8	1533.3	1375.4	1217.5	1191.6
57.5°	10674.3	9708.1	6865.4	2836.9	1556.3	1501.7	1490.2	1419.9	1282.1	1132.7	1104.0
60°	10753.2	9613.3	6618.5	1936.7	1339.5	1300.7	1356.7	1309.3	1184.4	1027.9	999.2
62.5°	10675.7	9509.9	5971.0	1398.4	1174.4	1195.9	1249.0	1197.4	1066.7	924.6	900.2
65°	10490.5	9115.1	4714.8	1089.7	1101.2	1148.5	1190.2	1104.0	864.3	723.6	709.2
67.5°	9985.1	8364.3	3033.6	999.2	1059.5	1108.3	1122.7	934.6	782.4	647.5	631.7
70°	8921.3	6714.7	1168.6	941.8	1017.9	1039.4	980.6	857.1	719.3	603.0	588.6
72.5°	6978.8	4409.0	674.8	861.4	928.9	908.8	910.2	769.5	648.9	538.4	526.9
75°	4337.2	1596.5	600.1	766.7	786.8	824.1	776.7	667.6	558.5	492.4	478.1
77.5°	1434.2	453.7	555.6	660.4	704.9	677.6	650.4	570.0	478.1	426.4	419.2
80°	347.4	340.3	498.2	516.8	552.7	506.8	503.9	473.8	403.4	373.3	366.1
82.5°	213.9	244.1	396.2	321.6	369.0	373.3	425.0	390.5	294.3	305.8	295.7
85°	132.1	188.1	208.2	155.1	156.5	209.6	254.1	235.5	176.6	166.5	165.1
87.5°	44.5	38.8	44.5	33.0	44.5	76.1	114.9	109.1	73.2	50.2	47.4
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)