

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: P509876

Luminaire Tested: **VERD-M-CA3-160-727-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P509876
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-CA3-160-727-U-T2-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2700K, 1000mA LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 18067 lumens
Efficiency: N/A
Efficacy: 111.0 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

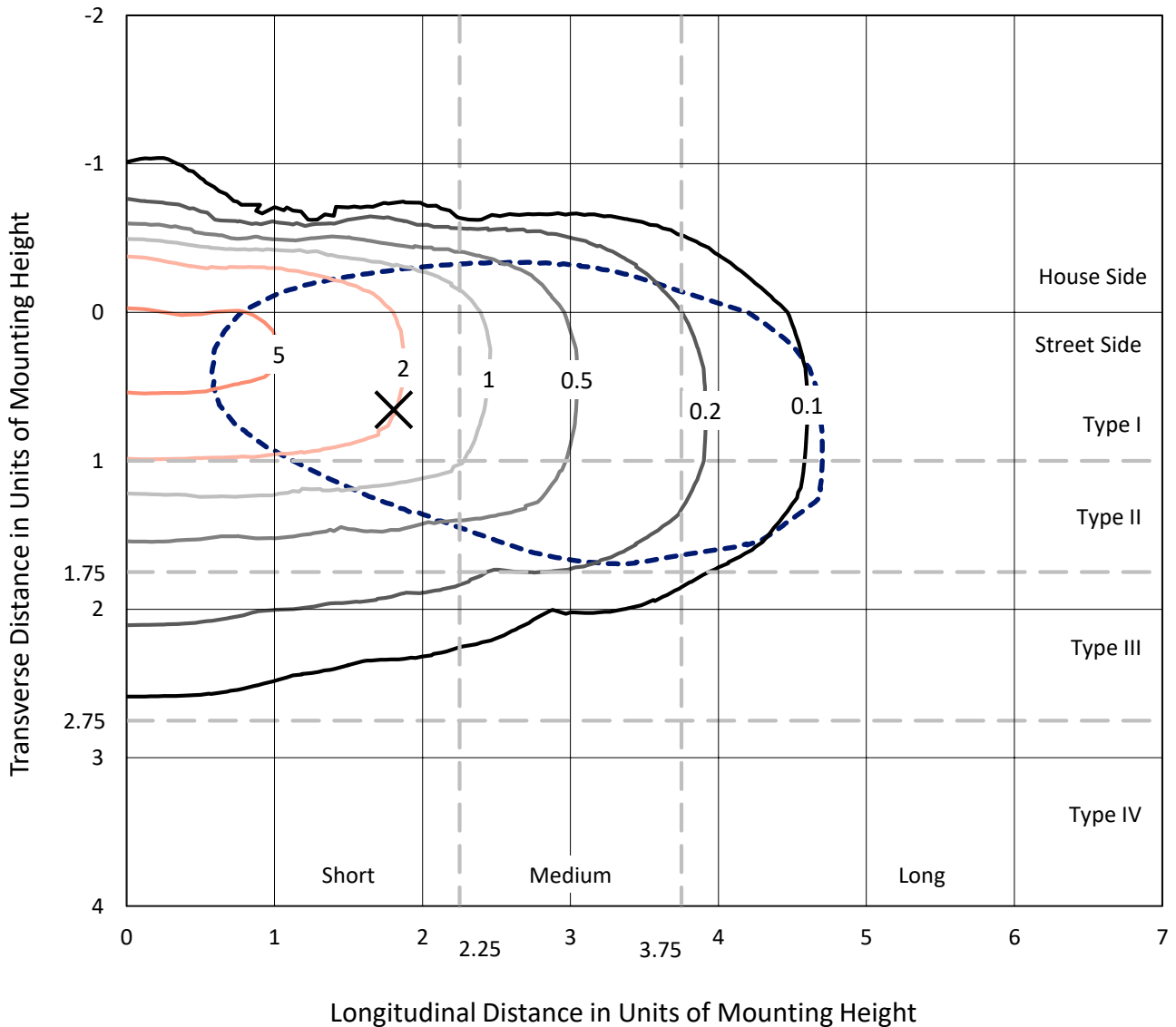
Input Watts (W): 162.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

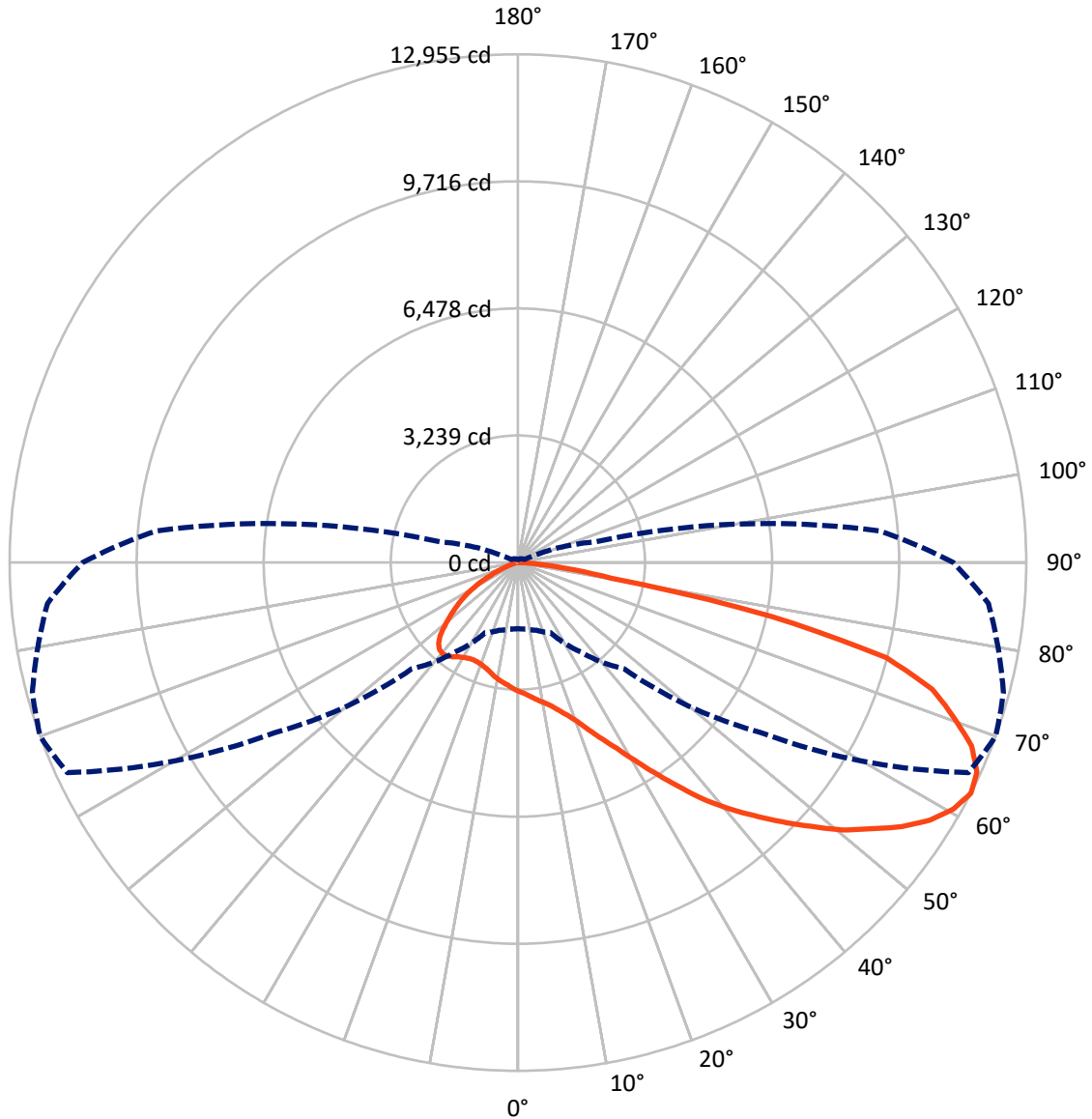
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.2 fc
 Type 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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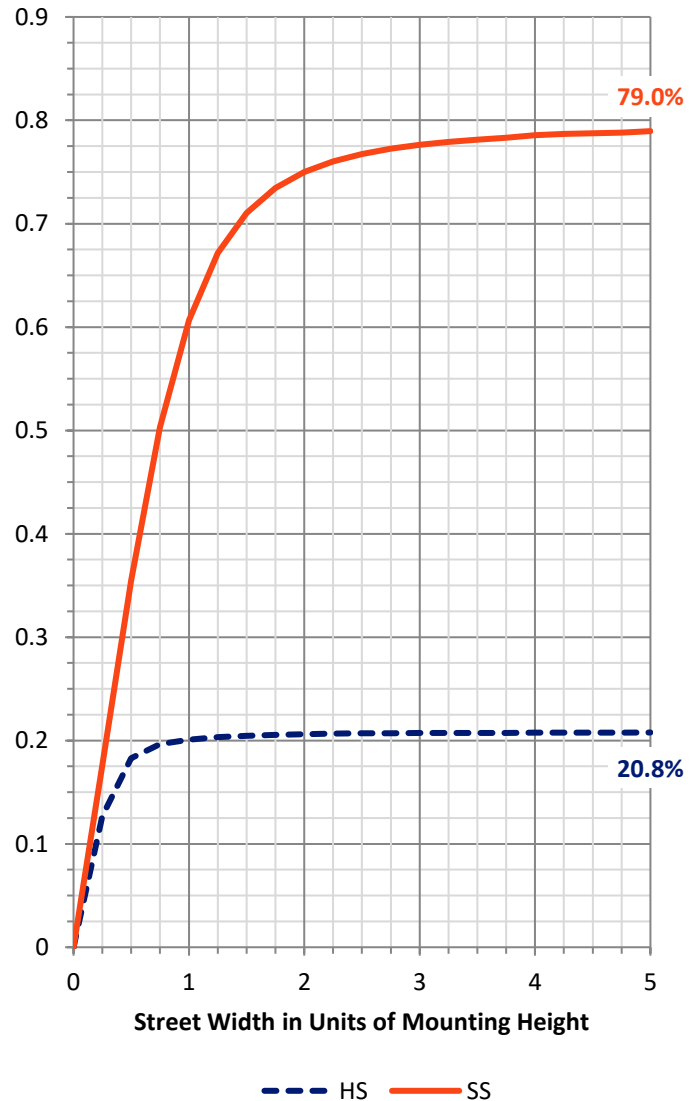
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3799.3	0.0	3799.3
	% Fixture	21.0	0.0	21.0
Street Side	Lumens	14267.7	0.0	14267.7
	% Fixture	79.0	0.0	79.0
Total	Lumens	18067.0	0.0	18067.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	311.8	1.7
10°-20°	930.6	5.2
20°-30°	1577.7	8.7
30°-40°	2320.1	12.8
40°-50°	3089.6	17.1
50°-60°	3614.2	20.0
60°-70°	3635.1	20.1
70°-80°	2301.1	12.7
80°-90°	286.7	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°	18067.0	100.0
0°-180°	18067.0	100.0



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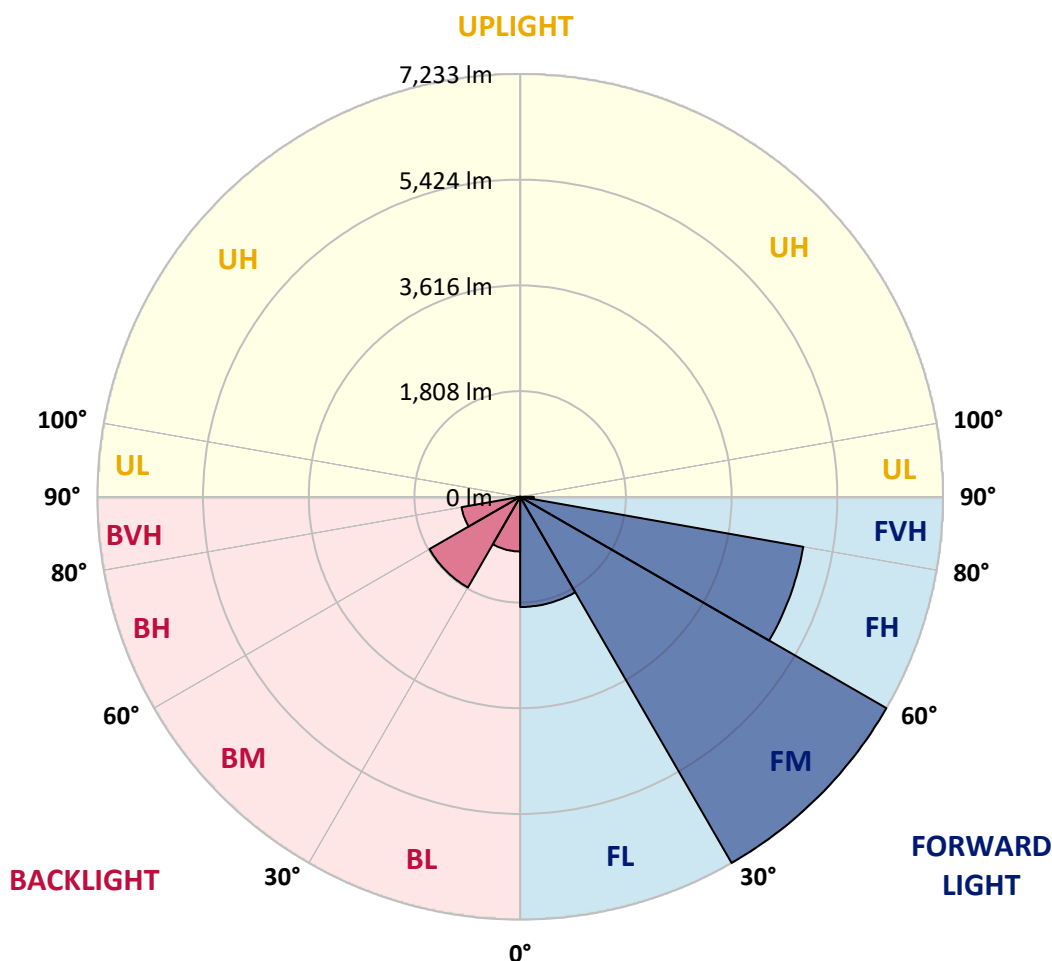
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1884.8	10.4			
FM (30°-60°)	7232.6	40.0			
FH (60°-80°)	4917.8	27.2			G2/5000
FVH (80°-90°)	232.5	1.3			G3/500
BL (0°-30°)	935.4	5.2	B2/1000		
BM (30°-60°)	1791.4	9.9	B2/2500		
BH (60°-80°)	1018.3	5.6	B3/2500		G3/2500
BVH (80°-90°)	54.2	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°	3284.5	3284.5	3284.5	3284.5	3284.5	3284.5	3284.5	3284.5	3284.5	3284.5	3284.5
2.5°	3464.8	3495.1	3471.9	3463.0	3470.1	3434.4	3405.9	3364.8	3345.2	3330.9	3307.7
5°	3640.6	3690.5	3660.2	3641.5	3638.8	3573.6	3535.3	3479.1	3435.3	3397.0	3338.1
7.5°	3826.2	3855.6	3844.0	3822.6	3808.3	3728.9	3661.1	3581.7	3533.5	3482.6	3383.6
10°	3988.6	4024.3	4012.7	3974.3	3960.9	3879.7	3802.1	3694.1	3628.1	3564.7	3428.2
12.5°	4156.3	4196.5	4172.4	4134.0	4122.4	4040.3	3960.0	3828.8	3746.7	3675.4	3486.2
15°	4310.7	4347.3	4330.3	4286.6	4275.0	4205.4	4117.1	3994.8	3905.6	3811.0	3568.3
17.5°	4433.8	4470.4	4449.0	4428.5	4424.9	4356.2	4303.5	4178.6	4093.9	3965.4	3694.1
20°	4523.9	4561.4	4550.7	4560.5	4598.0	4547.1	4515.0	4409.7	4323.2	4184.0	3875.2
22.5°	4595.3	4643.5	4686.3	4706.0	4775.6	4772.0	4764.9	4702.4	4634.6	4490.0	4091.2
25°	4602.5	4657.8	4742.5	4834.5	4961.2	5021.8	5066.5	5056.6	4977.2	4834.5	4390.1
27.5°	4613.2	4670.3	4757.7	4915.7	5142.3	5284.2	5358.2	5403.7	5357.3	5261.9	4730.1
30°	4590.0	4648.9	4758.6	4960.3	5266.3	5529.6	5661.6	5830.3	5835.6	5755.3	5243.1
32.5°	4484.7	4562.3	4695.3	4965.6	5386.8	5785.6	5989.1	6313.0	6383.5	6323.7	5772.3
35°	4308.9	4379.4	4569.4	4918.3	5460.0	5998.9	6371.0	6876.0	6980.4	6976.9	6395.1
37.5°	4114.4	4185.8	4399.9	4806.8	5507.2	6189.0	6707.4	7434.6	7642.5	7598.8	6983.1
40°	3899.3	3974.3	4221.4	4666.7	5484.0	6358.5	7063.4	7976.2	8234.1	8239.5	7545.2
42.5°	3649.5	3711.1	3959.1	4473.1	5407.3	6483.4	7394.5	8546.4	8817.7	8802.5	8075.3
45°	3410.4	3474.6	3691.4	4173.3	5229.7	6553.0	7719.2	9123.7	9420.9	9372.7	8664.2
47.5°	3121.2	3213.2	3460.3	3921.6	4955.8	6547.7	8003.0	9714.4	10048.1	10008.9	9172.8
50°	2402.1	2456.5	3016.0	3662.0	4584.6	6422.7	8280.5	10294.4	10716.5	10639.7	9715.3
52.5°	2163.8	2212.9	2393.1	3350.6	4247.3	6152.4	8511.6	10958.3	11274.2	11214.4	10269.4
55°	2045.1	2071.9	2181.7	2763.4	3918.1	5713.4	8666.0	11548.1	11876.5	11744.4	10787.9
57.5°	1896.1	1929.1	2056.7	2360.1	3513.0	5039.7	8630.3	12079.9	12383.3	12180.7	11244.7
60°	1781.9	1806.9	1926.5	2124.6	3094.5	4341.9	8265.3	12601.9	12754.5	12554.6	11699.8
62.5°	1685.5	1699.8	1783.7	1972.0	2775.9	3832.4	7553.3	12671.5	12955.2	12810.7	12038.8
65°	1566.0	1569.5	1668.6	1815.8	2481.5	3526.4	6942.1	12314.6	12855.3	12807.1	12161.1
67.5°	1425.9	1433.0	1533.0	1645.4	2127.2	3200.7	5990.0	12122.7	12467.2	12436.8	11919.3
70°	1250.1	1264.4	1356.3	1441.9	1801.5	2809.8	4767.5	11364.3	11772.9	11728.3	11122.5
72.5°	1080.6	1072.5	1158.2	1243.0	1500.8	2345.8	3613.8	10058.8	11043.0	11000.2	10087.4
75°	887.8	882.5	970.8	1051.1	1230.5	1895.2	2542.1	7439.1	9702.8	9834.9	8698.1
77.5°	547.0	551.4	602.3	655.8	833.4	1416.1	1622.2	4138.5	6591.4	7816.5	6826.1
80°	396.2	396.2	433.7	465.8	551.4	862.8	807.5	1725.7	2409.2	3772.6	4257.1
82.5°	257.0	246.3	269.5	297.1	306.9	373.9	369.4	865.5	1227.8	1477.6	1773.0
85°	133.8	148.1	89.2	125.8	133.0	124.0	127.6	406.0	545.2	698.7	769.2
87.5°	20.5	16.1	21.4	29.4	33.9	28.6	25.0	47.3	73.2	97.3	115.1
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°	3284.5	3284.5	3284.5	3284.5	3284.5	3284.5	3284.5	3284.5	3284.5	3284.5	3284.5
2.5°	3292.6	3288.1	3247.1	3187.3	3138.2	3097.2	3070.4	3052.5	3072.2	3036.5	3032.0
5°	3301.5	3271.2	3181.9	3096.3	3030.2	2941.9	2882.1	2842.0	2858.0	2826.8	2814.3
7.5°	3325.6	3270.3	3147.1	3010.6	2885.7	2791.1	2699.2	2610.9	2597.5	2577.8	2578.7
10°	3347.0	3267.6	3107.0	2928.5	2783.1	2616.2	2505.6	2414.6	2394.0	2370.8	2359.2
12.5°	3380.9	3273.8	3057.0	2841.1	2646.5	2453.8	2334.2	2227.2	2206.6	2161.1	2151.3
15°	3448.7	3296.1	3007.9	2733.1	2493.1	2298.6	2144.2	2050.5	2013.0	1962.2	1961.3
17.5°	3537.1	3361.3	2982.9	2631.4	2362.8	2145.1	1981.8	1887.2	1823.9	1793.5	1785.5
20°	3662.9	3446.0	2982.1	2539.5	2227.2	1980.9	1793.5	1686.4	1632.9	1607.9	1592.7
22.5°	3856.5	3571.0	2998.1	2475.2	2090.6	1822.1	1635.6	1488.3	1400.0	1331.3	1341.1
25°	4097.4	3758.3	3034.7	2416.3	1972.0	1670.4	1436.6	1232.3	1074.3	1005.6	1011.0
27.5°	4403.5	3982.3	3129.3	2356.6	1837.2	1507.1	1176.9	917.3	797.7	717.4	723.7
30°	4795.2	4260.7	3253.3	2310.2	1712.3	1278.7	886.0	676.4	571.1	505.0	498.8
32.5°	5263.7	4664.0	3388.9	2278.9	1575.8	993.1	638.9	496.1	393.5	356.0	361.4
35°	5843.6	5117.3	3596.0	2233.4	1342.0	706.7	456.0	335.5	282.9	275.7	276.6
37.5°	6372.8	5581.3	3801.2	2156.7	1059.2	502.4	309.6	255.2	243.6	240.9	244.5
40°	6891.2	6004.3	3986.8	2045.1	728.1	344.4	227.5	230.2	220.4	213.3	209.7
42.5°	7376.6	6412.0	4132.2	1839.9	497.9	227.5	201.7	209.7	207.9	193.6	187.4
45°	7900.4	6843.0	4212.5	1552.6	313.2	193.6	181.1	195.4	204.3	188.3	181.1
47.5°	8347.4	7263.3	4209.0	1189.4	212.4	182.9	170.4	182.9	193.6	182.0	175.8
50°	8863.2	7611.3	4094.7	754.9	188.3	169.5	163.3	167.8	182.0	174.0	167.8
52.5°	9436.0	8087.8	3921.6	421.2	178.5	160.6	151.7	157.0	169.5	159.7	163.3
55°	9910.7	8483.1	3514.8	287.3	174.0	149.9	144.6	148.1	153.5	143.7	149.0
57.5°	10334.6	8809.6	3103.4	235.6	167.8	142.8	141.9	134.7	133.8	127.6	122.2
60°	10763.8	9067.5	2548.4	213.3	161.5	143.7	128.5	118.7	110.6	104.4	101.7
62.5°	11093.0	9246.0	2015.7	192.7	152.6	134.7	117.8	101.7	88.3	80.3	80.3
65°	11189.4	9166.6	1418.7	174.9	142.8	126.7	105.3	83.0	66.9	61.6	58.9
67.5°	10880.6	8710.6	987.8	161.5	133.0	117.8	92.8	67.8	53.5	46.4	44.6
70°	10094.5	7947.7	582.7	142.8	120.5	102.6	84.8	55.3	43.7	36.6	34.8
72.5°	8932.8	6803.8	363.2	121.4	103.5	83.9	63.4	45.5	34.8	28.6	27.7
75°	7378.4	5303.8	237.4	93.7	82.1	66.0	48.2	36.6	30.3	24.1	22.3
77.5°	5916.8	3752.1	212.4	71.4	60.7	47.3	36.6	30.3	25.0	21.4	21.4
80°	3405.0	2141.5	174.0	49.1	37.5	35.7	28.6	25.0	23.2	20.5	19.6
82.5°	1673.1	1028.8	112.4	30.3	21.4	23.2	24.1	22.3	19.6	17.8	17.8
85°	576.4	342.6	45.5	19.6	14.3	14.3	15.2	16.1	15.2	14.3	14.3
87.5°	89.2	65.1	12.5	11.6	8.9	8.0	8.9	9.8	9.8	8.9	8.9
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)