

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: P509940

Luminaire Tested: **VERD-M-CA3-170-740-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P509940
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-CA3-170-740-U-T2-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 4000K, 1060mA LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22355 lumens
Efficiency: N/A
Efficacy: 129.4 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

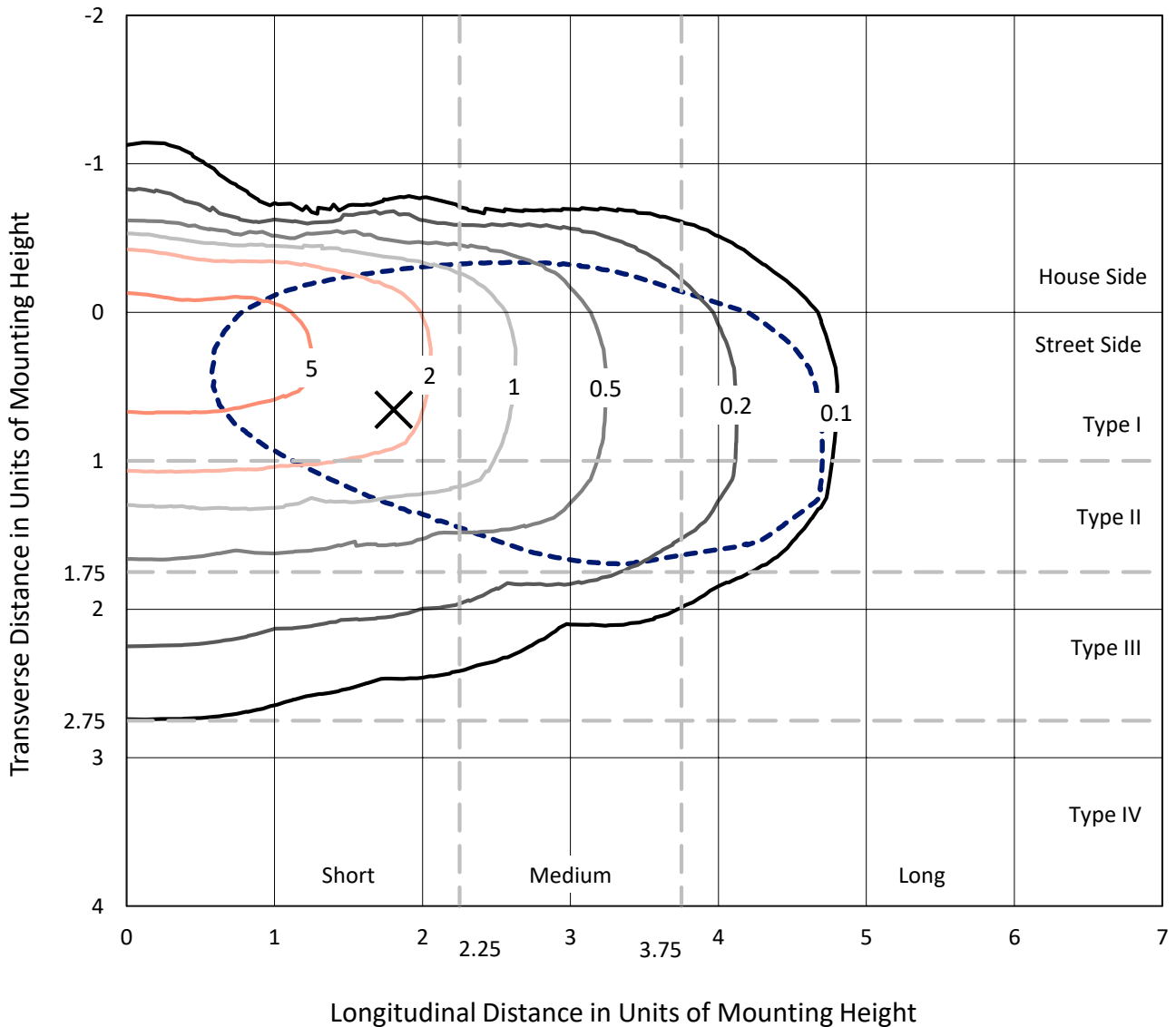
Input Watts (W): 172.8
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

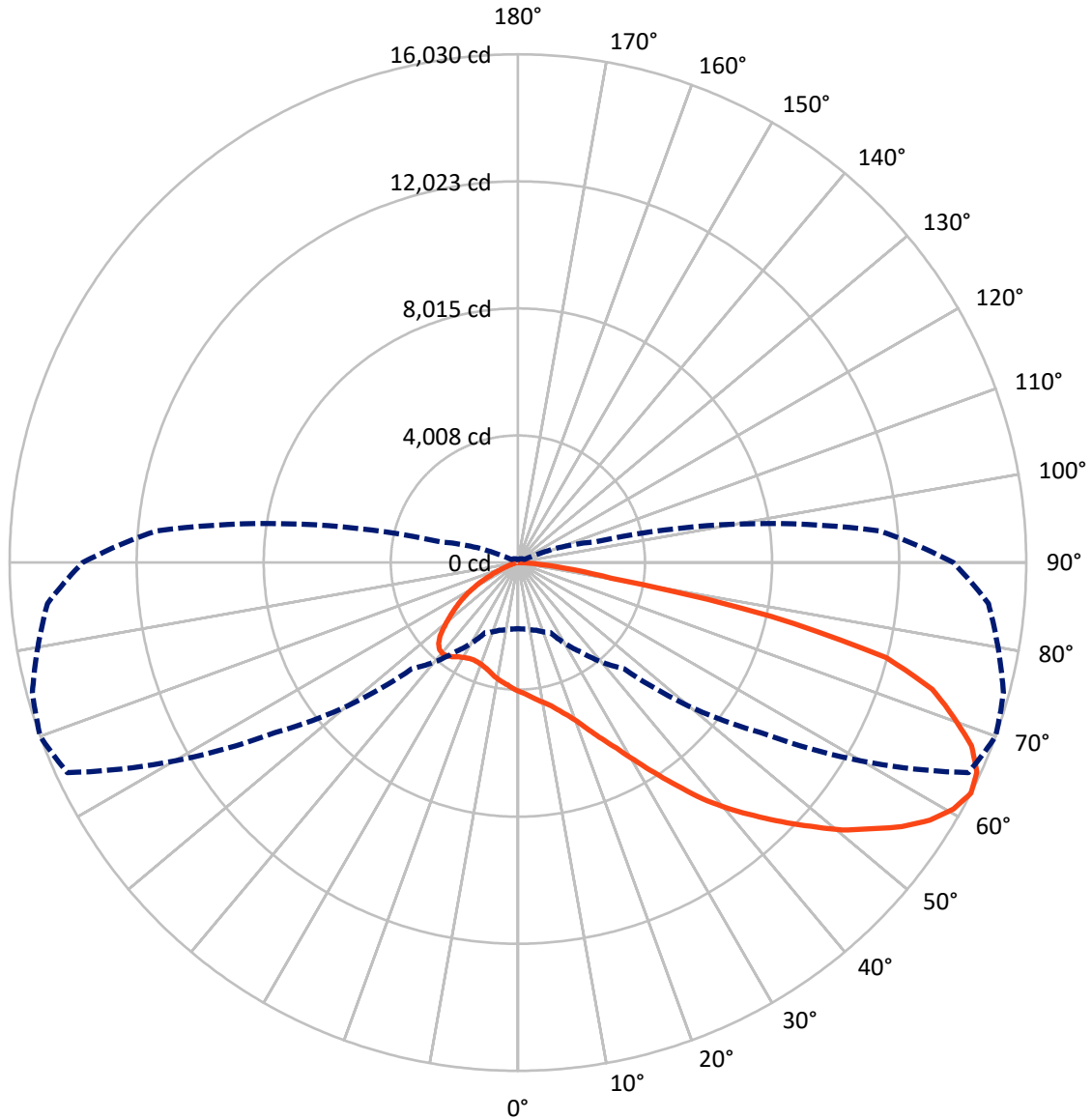
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.7 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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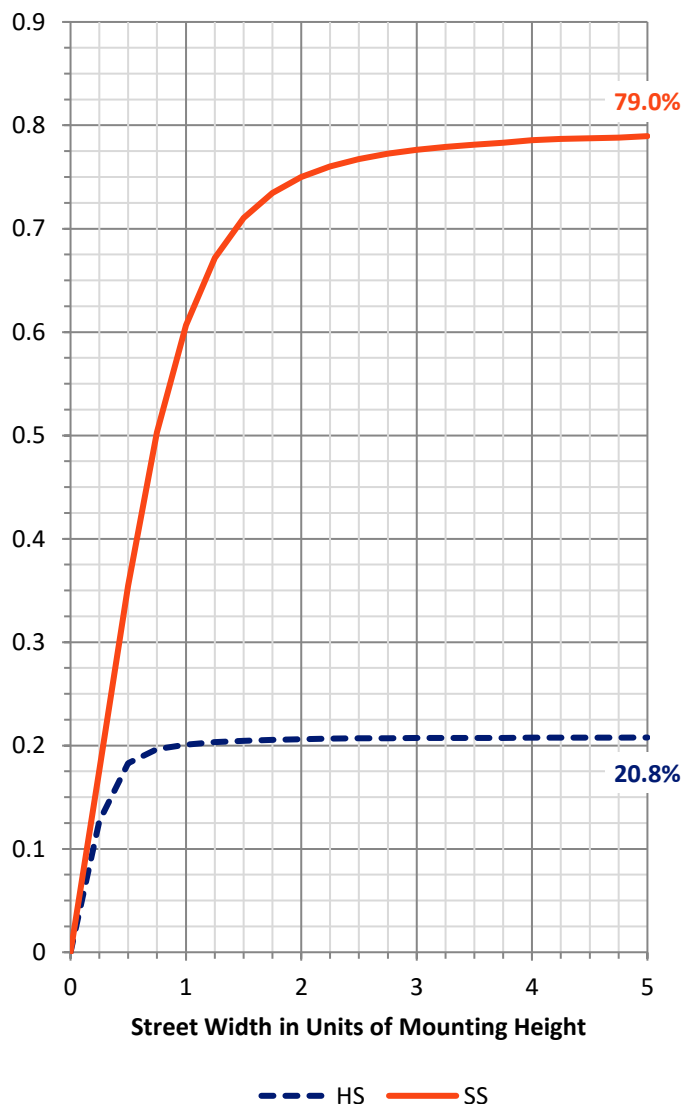
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4701.0	0.0	4701.0
	% Fixture	21.0	0.0	21.0
Street Side	Lumens	17654.0	0.0	17654.0
	% Fixture	79.0	0.0	79.0
Total	Lumens	22355.0	0.0	22355.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	385.9	1.7
10°-20°	1151.5	5.2
20°-30°	1952.1	8.7
30°-40°	2870.7	12.8
40°-50°	3822.9	17.1
50°-60°	4472.0	20.0
60°-70°	4497.8	20.1
70°-80°	2847.2	12.7
80°-90°	354.8	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°	22355.0	100.0
0°-180°	22355.0	100.0

Coefficient of Utilization



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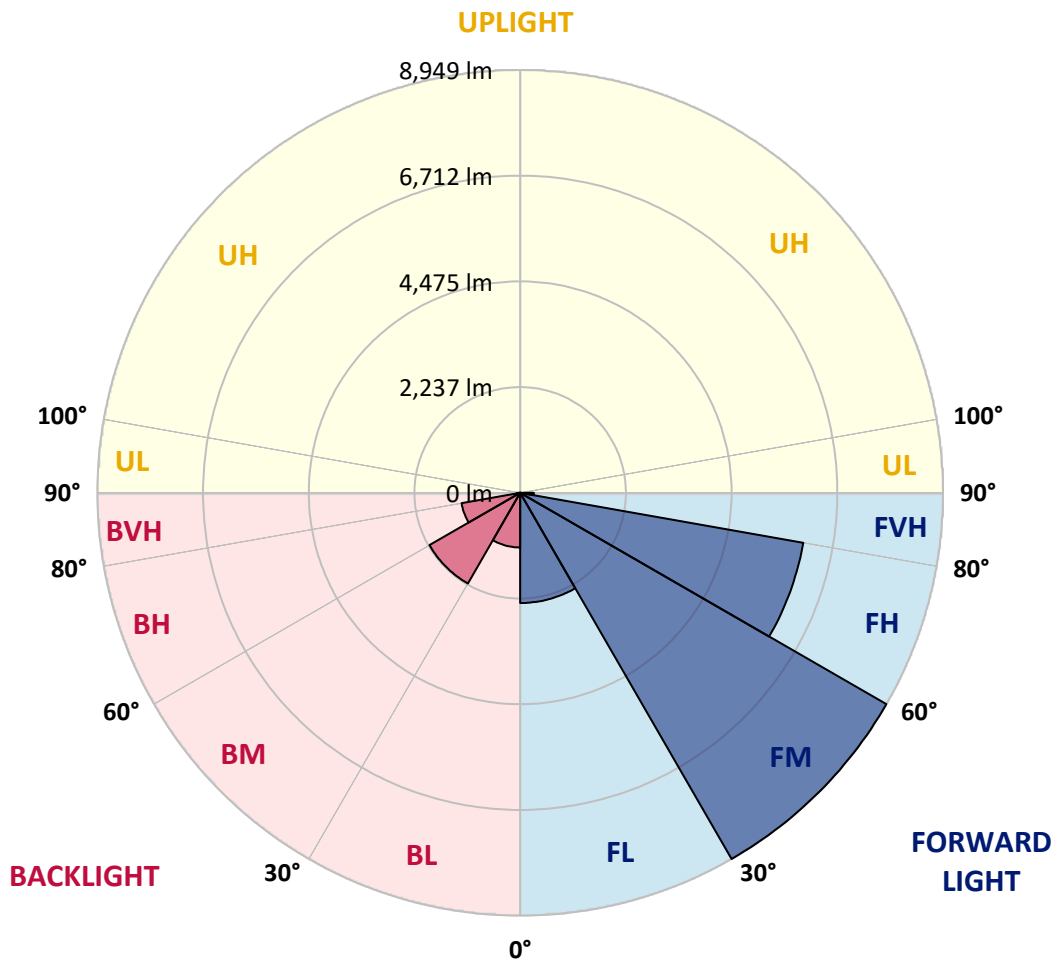
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2332.1	10.4			
FM (30°-60°)	8949.1	40.0			
FH (60°-80°)	6085.0	27.2			G3/7500
FVH (80°-90°)	287.7	1.3			G3/500
BL (0°-30°)	1157.4	5.2	B3/2500		
BM (30°-60°)	2216.6	9.9	B2/2500		
BH (60°-80°)	1260.0	5.6	B3/2500		G3/2500
BVH (80°-90°)	67.1	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°	4064.1	4064.1	4064.1	4064.1	4064.1	4064.1	4064.1	4064.1	4064.1	4064.1	4064.1
2.5°	4287.1	4324.6	4295.9	4284.9	4293.7	4249.6	4214.2	4163.5	4139.2	4121.5	4092.8
5°	4504.6	4566.4	4528.9	4505.7	4502.4	4421.8	4374.3	4304.8	4250.7	4203.2	4130.3
7.5°	4734.3	4770.7	4756.3	4729.8	4712.2	4613.9	4530.0	4431.7	4372.1	4309.2	4186.6
10°	4935.2	4979.4	4965.0	4917.5	4901.0	4800.5	4704.4	4570.9	4489.2	4410.8	4241.8
12.5°	5142.8	5192.4	5162.6	5115.2	5100.8	4999.2	4899.9	4737.6	4636.0	4547.7	4313.6
15°	5333.8	5379.0	5358.1	5304.0	5289.6	5203.5	5094.2	4942.9	4832.5	4715.5	4415.2
17.5°	5486.1	5531.4	5504.9	5479.5	5475.1	5390.1	5324.9	5170.4	5065.5	4906.5	4570.9
20°	5597.6	5644.0	5630.8	5642.9	5689.3	5626.3	5586.6	5456.3	5349.2	5177.0	4795.0
22.5°	5686.0	5745.6	5798.6	5822.9	5909.0	5904.6	5895.7	5818.5	5734.5	5555.7	5062.2
25°	5694.8	5763.3	5868.1	5981.9	6138.6	6213.7	6268.9	6256.8	6158.5	5981.9	5432.0
27.5°	5708.1	5778.7	5886.9	6082.3	6362.8	6538.3	6630.0	6686.3	6628.8	6510.7	5852.7
30°	5679.3	5752.2	5888.0	6137.5	6516.2	6841.9	7005.3	7214.0	7220.6	7121.3	6487.5
32.5°	5549.1	5645.1	5809.6	6144.2	6665.3	7158.8	7410.5	7811.3	7898.5	7824.6	7142.2
35°	5331.6	5418.8	5654.0	6085.6	6755.8	7422.7	7883.1	8508.0	8637.2	8632.7	7912.9
37.5°	5090.9	5179.2	5444.2	5947.6	6814.3	7657.8	8299.3	9199.1	9456.4	9402.3	8640.5
40°	4824.8	4917.5	5223.4	5774.3	6785.6	7867.6	8739.8	9869.3	10188.4	10195.0	9336.0
42.5°	4515.7	4591.8	4898.8	5534.7	6690.7	8022.2	9149.4	10574.8	10910.4	10891.7	9991.8
45°	4219.8	4299.3	4567.5	5163.7	6471.0	8108.3	9551.3	11289.1	11656.8	11597.2	10720.5
47.5°	3862.0	3975.8	4281.6	4852.4	6132.0	8101.7	9902.4	12020.0	12433.0	12384.4	11349.9
50°	2972.2	3039.5	3731.8	4531.1	5672.7	7947.1	10245.8	12737.7	13259.9	13165.0	12021.1
52.5°	2677.4	2738.1	2961.1	4145.8	5255.4	7612.6	10531.7	13559.1	13949.9	13876.0	12706.8
55°	2530.5	2563.7	2699.5	3419.3	4848.0	7069.4	10722.7	14288.9	14695.2	14531.8	13348.2
57.5°	2346.2	2387.0	2544.9	2920.3	4346.7	6235.8	10678.6	14946.9	15322.3	15071.7	13913.5
60°	2204.8	2235.7	2383.7	2628.8	3828.9	5372.4	10227.0	15592.8	15781.6	15534.3	14476.6
62.5°	2085.6	2103.3	2207.0	2440.0	3434.8	4742.0	9346.0	15678.9	16030.0	15851.2	14896.1
65°	1937.6	1942.1	2064.6	2246.8	3070.4	4363.3	8589.7	15237.3	15906.4	15846.7	15047.4
67.5°	1764.3	1773.1	1896.8	2035.9	2632.1	3960.3	7411.6	14999.9	15426.1	15388.6	14748.2
70°	1546.8	1564.5	1678.2	1784.2	2229.1	3476.7	5899.1	14061.5	14567.1	14511.9	13762.3
72.5°	1337.0	1327.1	1433.1	1538.0	1857.0	2902.6	4471.5	12446.2	13664.0	13611.0	12481.5
75°	1098.6	1091.9	1201.2	1300.6	1522.5	2345.0	3145.5	9204.6	12005.7	12169.1	10762.5
77.5°	676.8	682.3	745.2	811.5	1031.2	1752.2	2007.2	5120.7	8155.8	9671.7	8446.1
80°	490.2	490.2	536.6	576.3	682.3	1067.6	999.2	2135.3	2981.0	4668.0	5267.5
82.5°	318.0	304.7	333.4	367.7	379.8	462.6	457.1	1070.9	1519.2	1828.3	2193.8
85°	165.6	183.3	110.4	155.7	164.5	153.5	157.9	502.4	674.6	864.5	951.7
87.5°	25.4	19.9	26.5	36.4	42.0	35.3	30.9	58.5	90.5	120.3	142.4
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°	4064.1	4064.1	4064.1	4064.1	4064.1	4064.1	4064.1	4064.1	4064.1	4064.1	4064.1
2.5°	4074.0	4068.5	4017.7	3943.7	3883.0	3832.2	3799.1	3777.0	3801.3	3757.2	3751.6
5°	4085.1	4047.5	3937.1	3831.1	3749.4	3640.1	3566.2	3516.5	3536.3	3497.7	3482.2
7.5°	4114.9	4046.4	3894.1	3725.1	3570.6	3453.5	3339.8	3230.5	3214.0	3189.7	3190.8
10°	4141.4	4043.1	3844.4	3623.6	3443.6	3237.1	3100.2	2987.6	2962.2	2933.5	2919.2
12.5°	4183.3	4050.8	3782.5	3515.4	3274.7	3036.2	2888.3	2755.8	2730.4	2674.1	2661.9
15°	4267.2	4078.4	3721.8	3381.8	3084.8	2844.1	2653.1	2537.2	2490.8	2427.9	2426.7
17.5°	4376.5	4159.0	3690.9	3255.9	2923.6	2654.2	2452.1	2335.1	2256.7	2219.2	2209.2
20°	4532.2	4263.9	3689.8	3142.2	2755.8	2451.0	2219.2	2086.7	2020.5	1989.5	1970.8
22.5°	4771.8	4418.5	3709.7	3062.7	2586.8	2254.5	2023.8	1841.6	1732.3	1647.3	1659.4
25°	5069.9	4650.4	3754.9	2989.8	2440.0	2066.8	1777.6	1524.7	1329.3	1244.3	1250.9
27.5°	5448.6	4927.5	3872.0	2915.9	2273.3	1864.8	1456.3	1135.0	987.0	887.7	895.4
30°	5933.3	5271.9	4025.4	2858.4	2118.7	1582.1	1096.3	836.9	706.6	624.9	617.2
32.5°	6512.9	5771.0	4193.3	2819.8	1949.8	1228.8	790.5	613.9	486.9	440.5	447.1
35°	7230.6	6331.9	4449.4	2763.5	1660.5	874.4	564.2	415.1	350.0	341.2	342.3
37.5°	7885.3	6906.0	4703.3	2668.5	1310.5	621.6	383.1	315.8	301.4	298.1	302.5
40°	8526.7	7429.3	4933.0	2530.5	900.9	426.2	281.5	284.9	272.7	263.9	259.5
42.5°	9127.4	7933.9	5113.0	2276.6	616.1	281.5	249.5	259.5	257.2	239.6	231.9
45°	9775.5	8467.1	5212.3	1921.1	387.5	239.6	224.1	241.8	252.8	233.0	224.1
47.5°	10328.6	8987.1	5207.9	1471.7	262.8	226.3	210.9	226.3	239.6	225.2	217.5
50°	10966.7	9417.7	5066.6	934.0	233.0	209.8	202.0	207.6	225.2	215.3	207.6
52.5°	11675.6	10007.3	4852.4	521.1	220.8	198.7	187.7	194.3	209.8	197.6	202.0
55°	12262.9	10496.4	4348.9	355.5	215.3	185.5	178.9	183.3	189.9	177.8	184.4
57.5°	12787.4	10900.5	3840.0	291.5	207.6	176.7	175.5	166.7	165.6	157.9	151.3
60°	13318.4	11219.6	3153.2	263.9	199.8	177.8	159.0	146.8	136.9	129.2	125.9
62.5°	13725.8	11440.4	2494.1	238.5	188.8	166.7	145.7	125.9	109.3	99.4	99.4
65°	13845.1	11342.1	1755.5	216.4	176.7	156.8	130.3	102.7	82.8	76.2	72.9
67.5°	13463.1	10777.9	1222.2	199.8	164.5	145.7	114.8	83.9	66.2	57.4	55.2
70°	12490.4	9834.0	721.0	176.7	149.0	127.0	104.9	68.5	54.1	45.3	43.1
72.5°	11052.9	8418.5	449.4	150.2	128.1	103.8	78.4	56.3	43.1	35.3	34.2
75°	9129.6	6562.6	293.7	115.9	101.6	81.7	59.6	45.3	37.5	29.8	27.6
77.5°	7321.1	4642.6	262.8	88.3	75.1	58.5	45.3	37.5	30.9	26.5	26.5
80°	4213.1	2649.8	215.3	60.7	46.4	44.2	35.3	30.9	28.7	25.4	24.3
82.5°	2070.1	1273.0	139.1	37.5	26.5	28.7	29.8	27.6	24.3	22.1	22.1
85°	713.2	424.0	56.3	24.3	17.7	17.7	18.8	19.9	18.8	17.7	17.7
87.5°	110.4	80.6	15.5	14.4	11.0	9.9	11.0	12.1	12.1	11.0	11.0
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)