

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: P509908

Luminaire Tested: **VERD-M-CA3-160-760-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P509908
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-CA3-160-760-U-T2-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5700K, 1000mA LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21267 lumens
Efficiency: N/A
Efficacy: 130.7 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

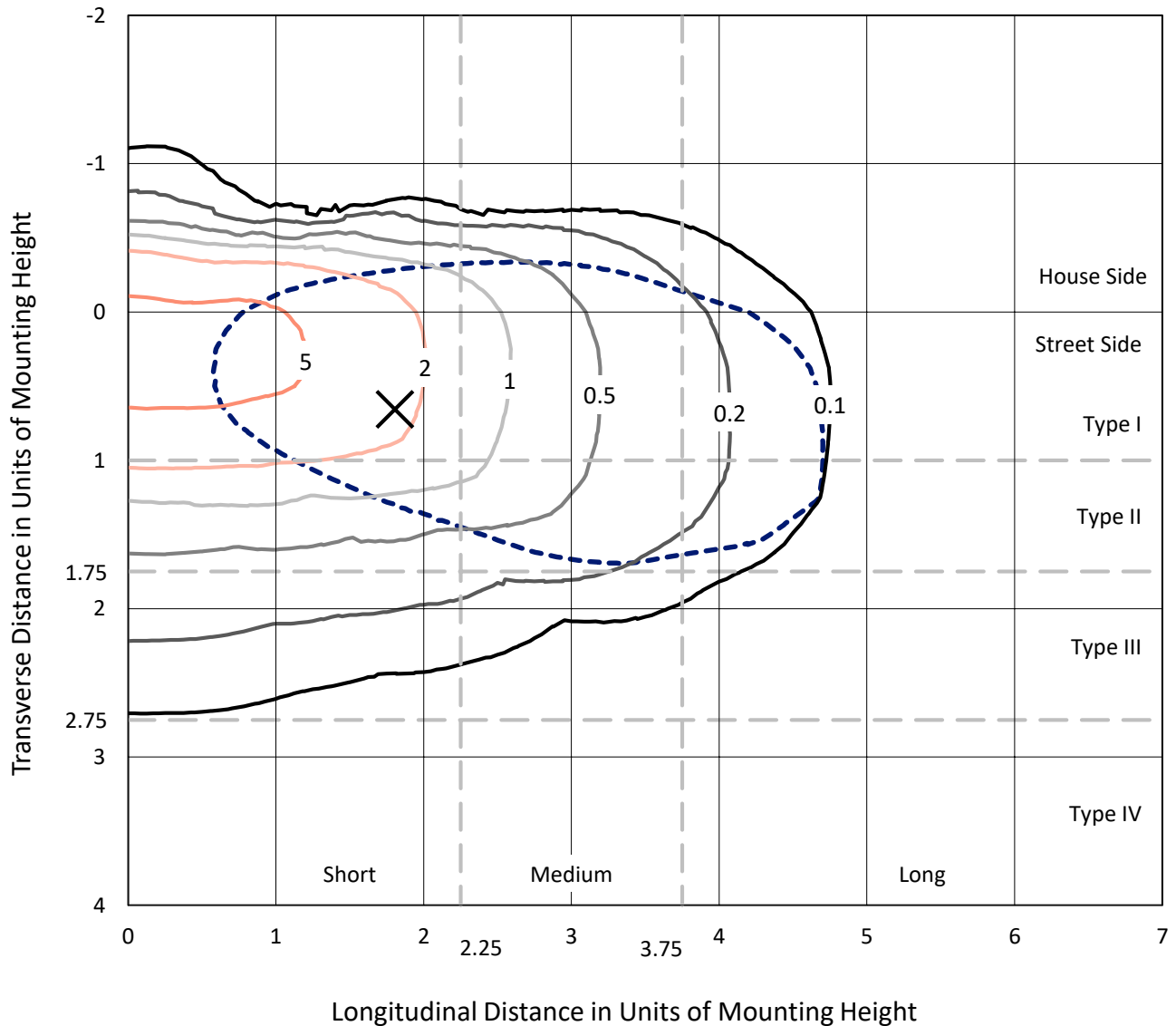
Input Watts (W): 162.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

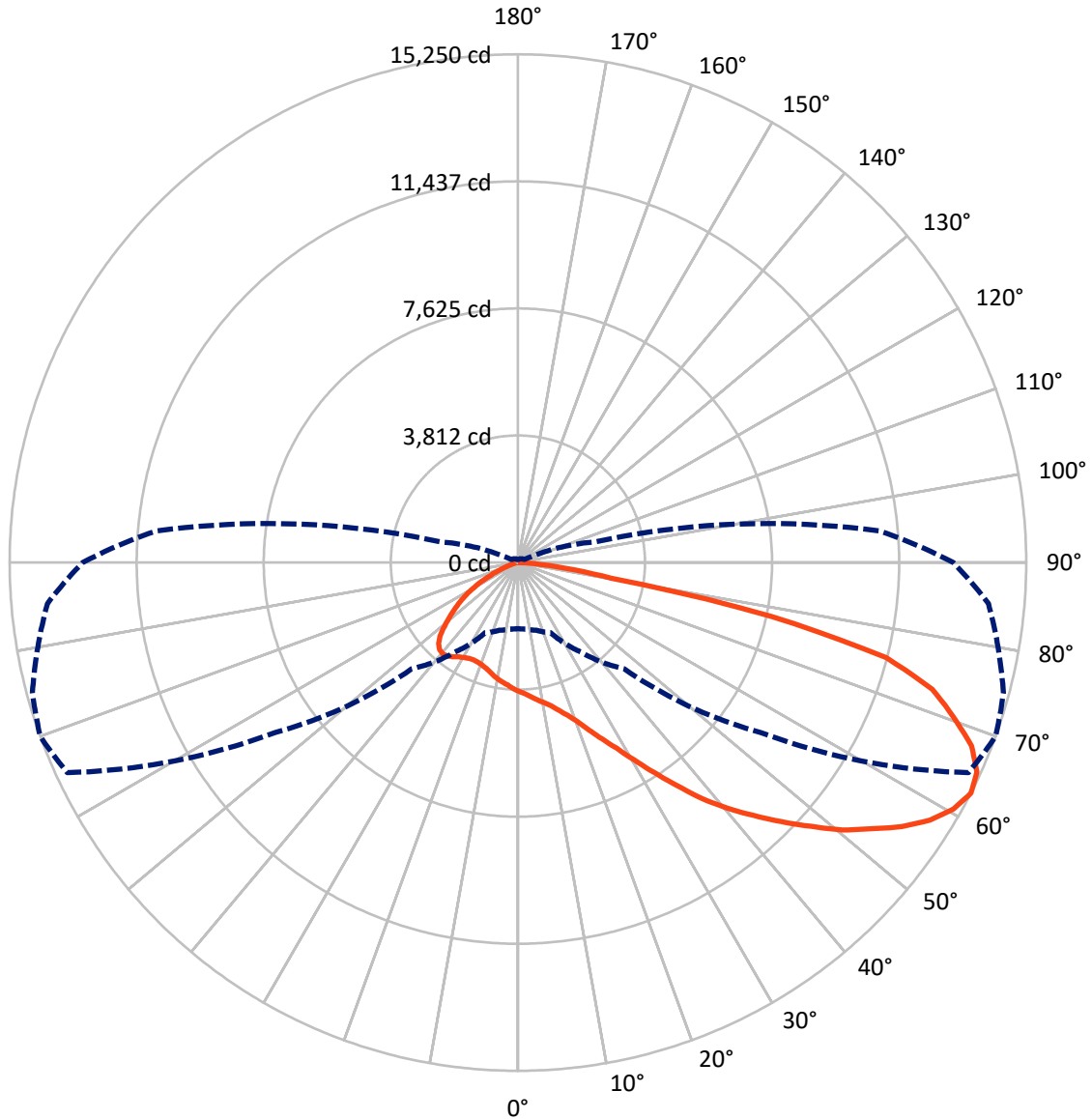
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.3 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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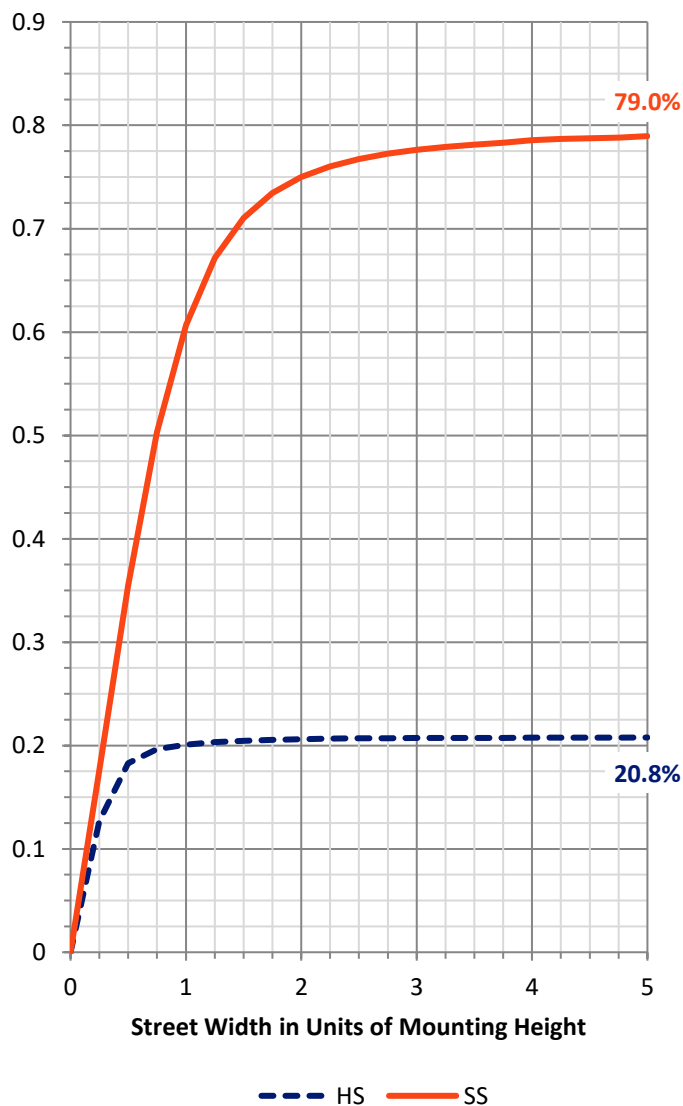
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4472.2	0.0	4472.2
	% Fixture	21.0	0.0	21.0
Street Side	Lumens	16794.8	0.0	16794.8
	% Fixture	79.0	0.0	79.0
Total	Lumens	21267.0	0.0	21267.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	367.1	1.7
10°-20°	1095.5	5.2
20°-30°	1857.1	8.7
30°-40°	2731.0	12.8
40°-50°	3636.9	17.1
50°-60°	4254.4	20.0
60°-70°	4278.9	20.1
70°-80°	2708.6	12.7
80°-90°	337.5	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°	21267.0	100.0
0°-180°	21267.0	100.0



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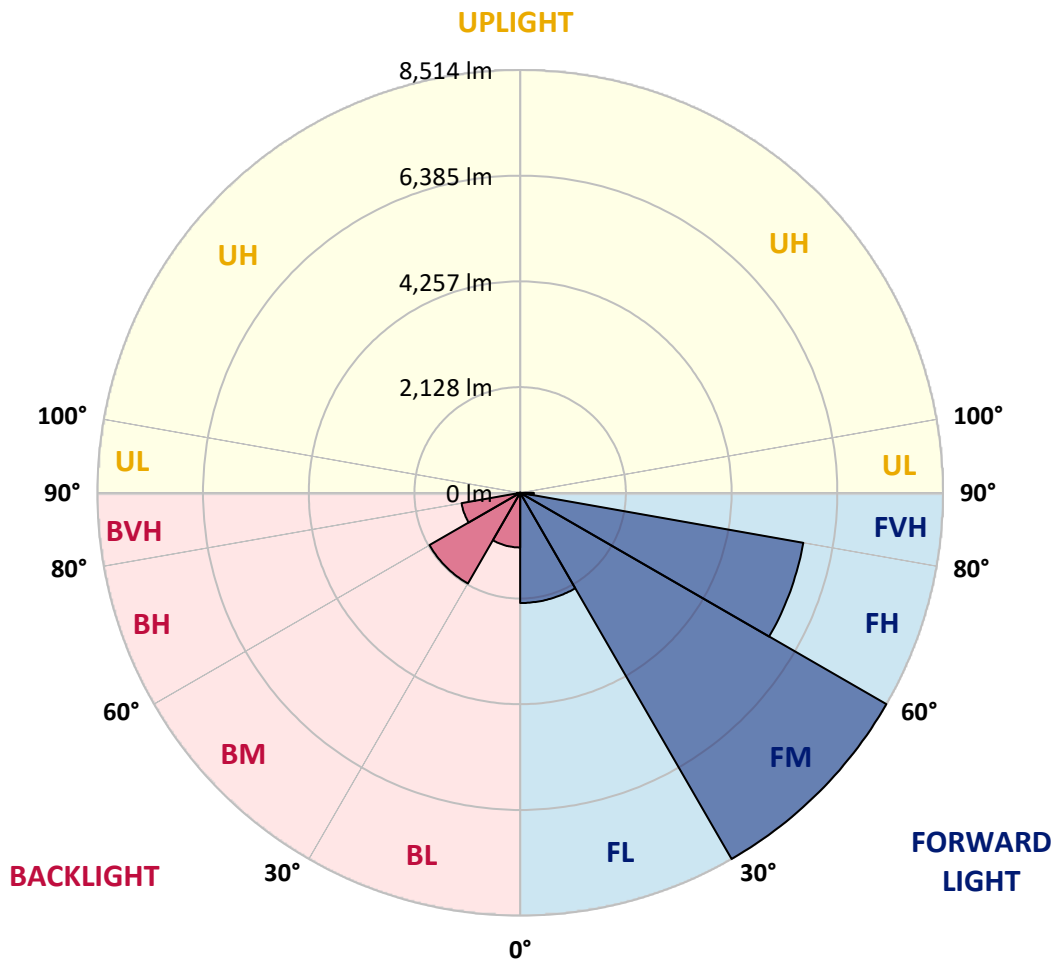
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2218.6	10.4			
FM (30°-60°)	8513.6	40.0			
FH (60°-80°)	5788.9	27.2			G3/7500
FVH (80°-90°)	273.7	1.3			G3/500
BL (0°-30°)	1101.1	5.2	B3/2500		
BM (30°-60°)	2108.7	9.9	B2/2500		
BH (60°-80°)	1198.6	5.6	B3/2500		G3/2500
BVH (80°-90°)	63.8	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°	3866.3	3866.3	3866.3	3866.3	3866.3	3866.3	3866.3	3866.3	3866.3	3866.3	3866.3
2.5°	4078.5	4114.2	4086.9	4076.4	4084.8	4042.7	4009.1	3960.8	3937.7	3920.9	3893.6
5°	4285.4	4344.2	4308.5	4286.4	4283.3	4206.6	4161.4	4095.3	4043.8	3998.6	3929.3
7.5°	4503.8	4538.5	4524.9	4499.6	4482.8	4389.4	4309.5	4216.1	4159.3	4099.5	3982.9
10°	4695.0	4737.0	4723.4	4678.2	4662.4	4566.9	4475.5	4348.4	4270.7	4196.1	4035.4
12.5°	4892.5	4939.7	4911.4	4866.2	4852.6	4755.9	4661.4	4507.0	4410.4	4326.3	4103.7
15°	5074.2	5117.2	5097.3	5045.8	5032.2	4950.2	4846.3	4702.4	4597.3	4486.0	4200.3
17.5°	5219.1	5262.2	5237.0	5212.8	5208.6	5127.7	5065.8	4918.7	4818.9	4667.7	4348.4
20°	5325.2	5369.3	5356.7	5368.3	5412.4	5352.5	5314.7	5190.8	5088.9	4925.0	4561.6
22.5°	5409.2	5466.0	5516.4	5539.5	5621.4	5617.2	5608.8	5535.3	5455.5	5285.3	4815.8
25°	5417.6	5482.8	5582.5	5690.7	5839.9	5911.3	5963.8	5952.3	5858.8	5690.7	5167.7
27.5°	5430.2	5497.5	5600.4	5786.3	6053.1	6220.1	6307.3	6360.8	6306.2	6193.8	5567.8
30°	5402.9	5472.3	5601.4	5838.8	6199.1	6508.9	6664.4	6862.9	6869.2	6774.7	6171.8
32.5°	5279.0	5370.4	5526.9	5845.1	6340.9	6810.4	7049.9	7431.1	7514.1	7443.7	6794.6
35°	5072.1	5155.1	5378.8	5789.5	6427.0	7061.4	7499.4	8093.9	8216.8	8212.6	7527.8
37.5°	4843.1	4927.1	5179.2	5658.2	6482.7	7285.1	7895.4	8751.4	8996.1	8944.7	8219.9
40°	4590.0	4678.2	4969.1	5493.3	6455.4	7484.7	8314.5	9389.0	9692.5	9698.8	8881.7
42.5°	4295.9	4368.4	4660.3	5265.3	6365.0	7631.8	8704.1	10060.1	10379.4	10361.6	9505.6
45°	4014.4	4090.0	4345.2	4912.4	6156.0	7713.7	9086.5	10739.7	11089.5	11032.7	10198.8
47.5°	3674.1	3782.3	4073.2	4616.2	5833.6	7707.4	9420.5	11435.0	11827.8	11781.6	10797.5
50°	2827.5	2891.6	3550.1	4310.6	5396.6	7560.3	9747.1	12117.7	12614.6	12524.2	11436.1
52.5°	2547.1	2604.8	2817.0	3944.0	4999.6	7242.1	10019.2	12899.2	13271.0	13200.6	12088.3
55°	2407.4	2438.9	2568.1	3252.9	4612.0	6725.3	10200.9	13593.5	13980.0	13824.5	12698.6
57.5°	2232.0	2270.8	2421.0	2778.1	4135.2	5932.3	10158.9	14219.5	14576.6	14338.2	13236.4
60°	2097.5	2126.9	2267.7	2500.9	3642.6	5110.9	9729.3	14833.9	15013.5	14778.2	13772.0
62.5°	1984.1	2000.9	2099.6	2321.2	3267.6	4511.2	8891.1	14915.8	15249.8	15079.7	14171.2
65°	1843.3	1847.5	1964.1	2137.4	2921.0	4150.9	8171.6	14495.7	15132.2	15075.5	14315.0
67.5°	1678.4	1686.8	1804.5	1936.8	2504.0	3767.6	7050.9	14269.9	14675.3	14639.6	14030.4
70°	1471.5	1488.3	1596.5	1697.3	2120.6	3307.5	5612.0	13377.1	13858.2	13805.6	13092.5
72.5°	1272.0	1262.5	1363.3	1463.1	1766.7	2761.3	4253.9	11840.5	12999.0	12948.6	11874.1
75°	1045.1	1038.8	1142.8	1237.3	1448.4	2230.9	2992.4	8756.7	11421.4	11576.8	10238.7
77.5°	643.9	649.1	709.0	772.0	981.0	1666.9	1909.5	4871.5	7758.8	9201.0	8035.1
80°	466.3	466.3	510.5	548.3	649.1	1015.7	950.6	2031.4	2835.9	4440.8	5011.2
82.5°	302.5	289.9	317.2	349.8	361.3	440.1	434.8	1018.8	1445.3	1739.4	2087.0
85°	157.6	174.4	105.0	148.1	156.5	146.0	150.2	477.9	641.8	822.4	905.4
87.5°	24.2	18.9	25.2	34.7	39.9	33.6	29.4	55.7	86.1	114.5	135.5
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°	3866.3	3866.3	3866.3	3866.3	3866.3	3866.3	3866.3	3866.3	3866.3	3866.3	3866.3
2.5°	3875.7	3870.5	3822.2	3751.8	3694.0	3645.7	3614.2	3593.2	3616.3	3574.3	3569.0
5°	3886.2	3850.5	3745.5	3644.7	3566.9	3463.0	3392.6	3345.3	3364.2	3327.5	3312.8
7.5°	3914.6	3849.5	3704.5	3543.8	3396.8	3285.5	3177.3	3073.3	3057.5	3034.4	3035.5
10°	3939.8	3846.3	3657.3	3447.2	3276.0	3079.6	2949.3	2842.2	2818.1	2790.7	2777.1
12.5°	3979.7	3853.7	3598.5	3344.3	3115.3	2888.4	2747.7	2621.6	2597.5	2543.9	2532.4
15°	4059.6	3879.9	3540.7	3217.2	2934.6	2705.7	2524.0	2413.7	2369.6	2309.7	2308.6
17.5°	4163.5	3956.6	3511.3	3097.4	2781.3	2525.0	2332.8	2221.5	2146.9	2111.2	2101.7
20°	4311.6	4056.4	3510.2	2989.3	2621.6	2331.7	2111.2	1985.1	1922.1	1892.7	1874.9
22.5°	4539.6	4203.5	3529.1	2913.6	2460.9	2144.8	1925.3	1752.0	1648.0	1567.1	1578.7
25°	4823.1	4424.0	3572.2	2844.3	2321.2	1966.2	1691.0	1450.5	1264.6	1183.7	1190.0
27.5°	5183.4	4687.7	3683.5	2773.9	2162.6	1774.0	1385.4	1079.7	939.0	844.5	851.8
30°	5644.5	5015.4	3829.5	2719.3	2015.6	1505.1	1043.0	796.2	672.2	594.5	587.1
32.5°	6195.9	5490.1	3989.2	2682.6	1854.9	1169.0	752.0	584.0	463.2	419.1	425.4
35°	6878.7	6023.7	4232.9	2629.0	1579.7	831.9	536.7	394.9	333.0	324.6	325.6
37.5°	7501.5	6569.9	4474.4	2538.7	1246.8	591.3	364.5	300.4	286.7	283.6	287.8
40°	8111.8	7067.7	4692.9	2407.4	857.1	405.4	267.8	271.0	259.4	251.0	246.8
42.5°	8683.1	7547.7	4864.1	2165.8	586.1	267.8	237.4	246.8	244.7	227.9	220.6
45°	9299.7	8055.0	4958.6	1827.6	368.7	227.9	213.2	230.0	240.5	221.6	213.2
47.5°	9825.9	8549.7	4954.4	1400.1	250.0	215.3	200.6	215.3	227.9	214.3	206.9
50°	10433.0	8959.4	4820.0	888.6	221.6	199.6	192.2	197.5	214.3	204.8	197.5
52.5°	11107.3	9520.3	4616.2	495.8	210.1	189.1	178.6	184.9	199.6	188.0	192.2
55°	11666.1	9985.6	4137.3	338.2	204.8	176.5	170.2	174.4	180.7	169.1	175.4
57.5°	12165.0	10370.0	3653.1	277.3	197.5	168.1	167.0	158.6	157.6	150.2	143.9
60°	12670.2	10673.5	2999.8	251.0	190.1	169.1	151.2	139.7	130.2	122.9	119.7
62.5°	13057.8	10883.6	2372.7	226.9	179.6	158.6	138.6	119.7	104.0	94.5	94.5
65°	13171.2	10790.1	1670.0	205.9	168.1	149.1	123.9	97.7	78.8	72.5	69.3
67.5°	12807.8	10253.4	1162.7	190.1	156.5	138.6	109.2	79.8	63.0	54.6	52.5
70°	11882.5	9355.4	685.9	168.1	141.8	120.8	99.8	65.1	51.5	43.1	41.0
72.5°	10514.9	8008.8	427.5	142.8	121.8	98.7	74.6	53.6	41.0	33.6	32.6
75°	8685.2	6243.2	279.4	110.3	96.6	77.7	56.7	43.1	35.7	28.4	26.3
77.5°	6964.8	4416.7	250.0	84.0	71.4	55.7	43.1	35.7	29.4	25.2	25.2
80°	4008.1	2520.8	204.8	57.8	44.1	42.0	33.6	29.4	27.3	24.2	23.1
82.5°	1969.4	1211.0	132.3	35.7	25.2	27.3	28.4	26.3	23.1	21.0	21.0
85°	678.5	403.3	53.6	23.1	16.8	16.8	17.9	18.9	17.9	16.8	16.8
87.5°	105.0	76.7	14.7	13.7	10.5	9.5	10.5	11.6	11.6	10.5	10.5
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)