

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: P510206

Luminaire Tested: **VERD-M-CA4-230-722-U-T3-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510206
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-CA4-230-722-U-T3-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 2200K, 1050mA LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24667 lumens
Efficiency: N/A
Efficacy: 105.7 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

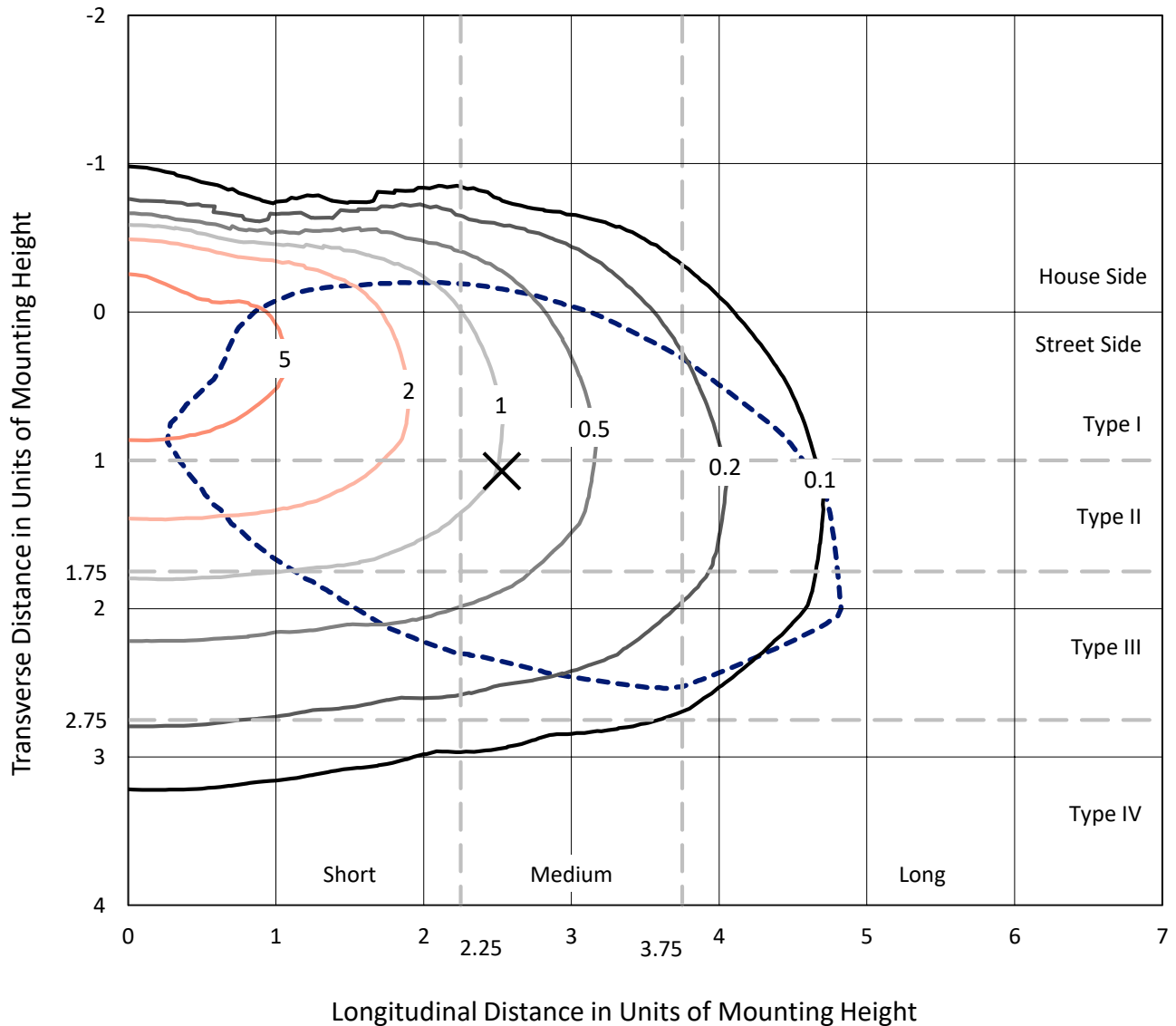
Input Watts (W): 233.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

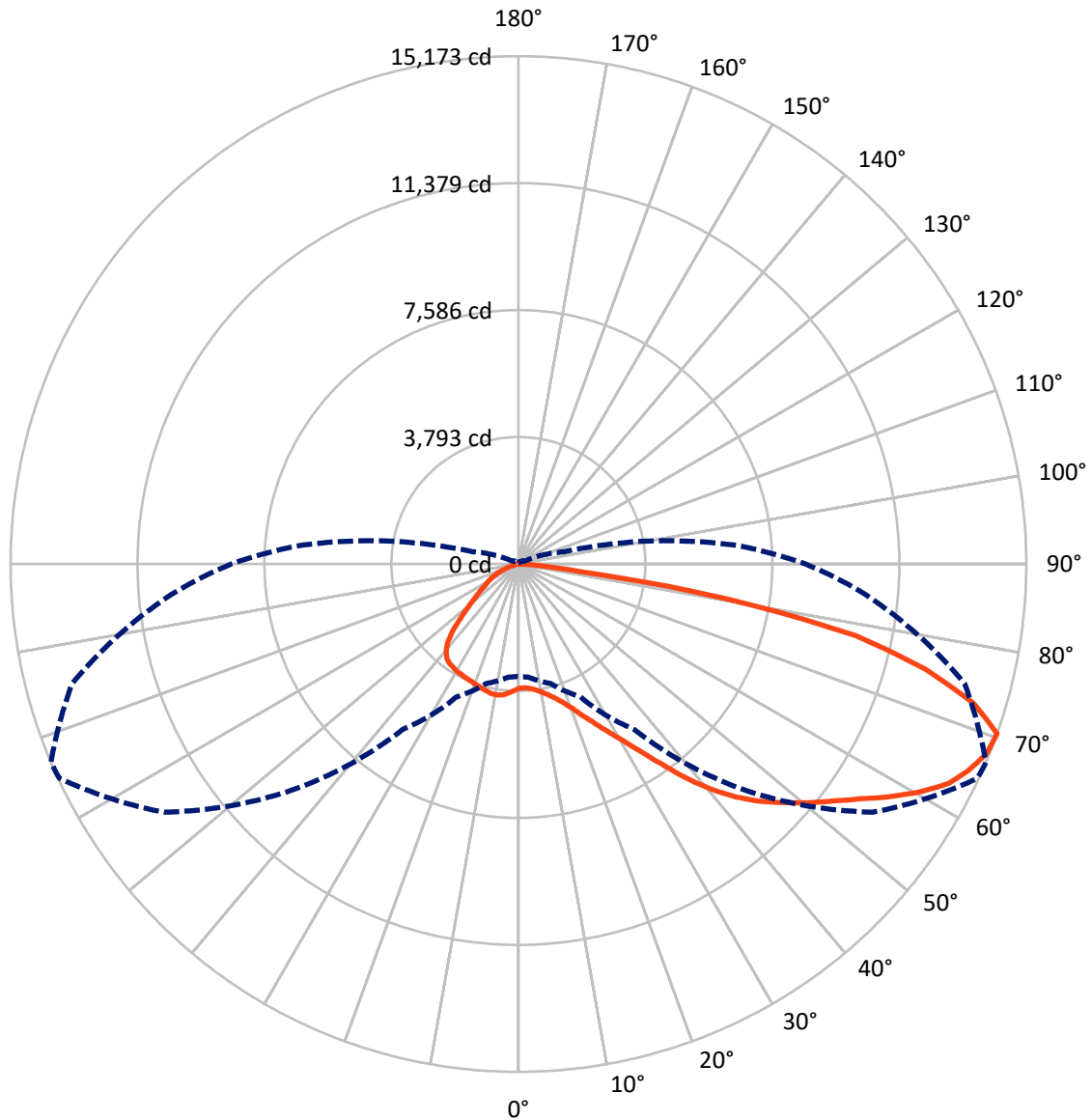
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 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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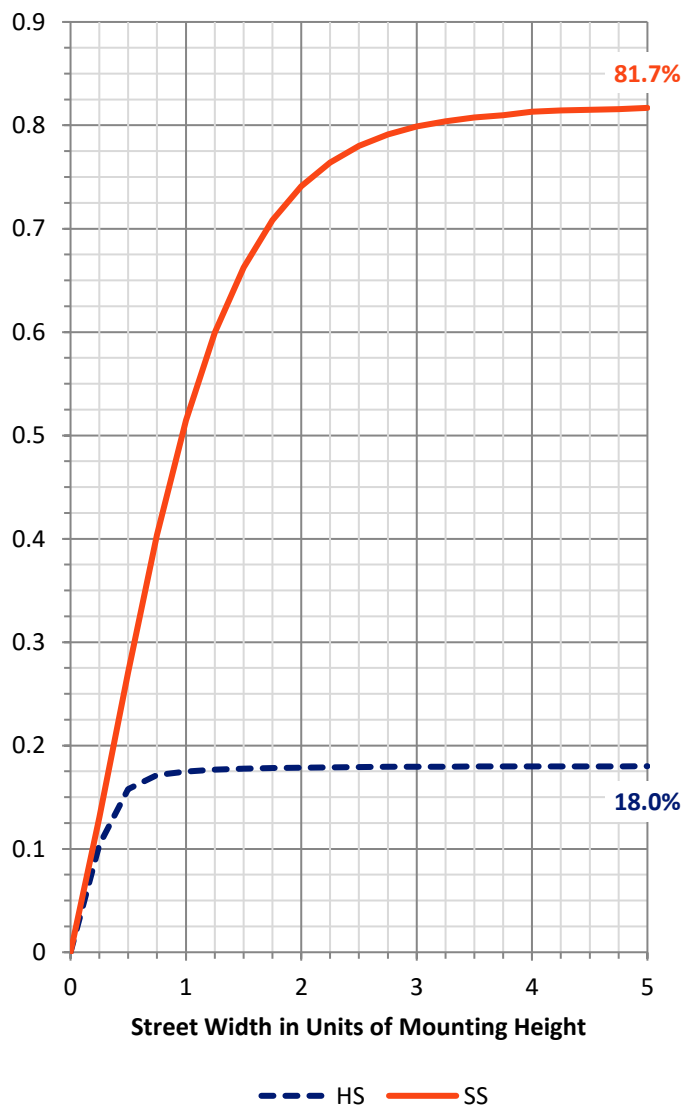
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4494.5	0.0	4494.5
	% Fixture	18.2	0.0	18.2
Street Side	Lumens	20172.5	0.0	20172.5
	% Fixture	81.8	0.0	81.8
Total	Lumens	24667.0	0.0	24667.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	369.7	1.5
10°-20°	1153.3	4.7
20°-30°	2001.1	8.1
30°-40°	2972.0	12.0
40°-50°	4077.4	16.5
50°-60°	5007.3	20.3
60°-70°	5368.3	21.8
70°-80°	3407.9	13.8
80°-90°	310.1	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°	24667.0	100.0
0°-180°	24667.0	100.0

Coefficient of Utilization



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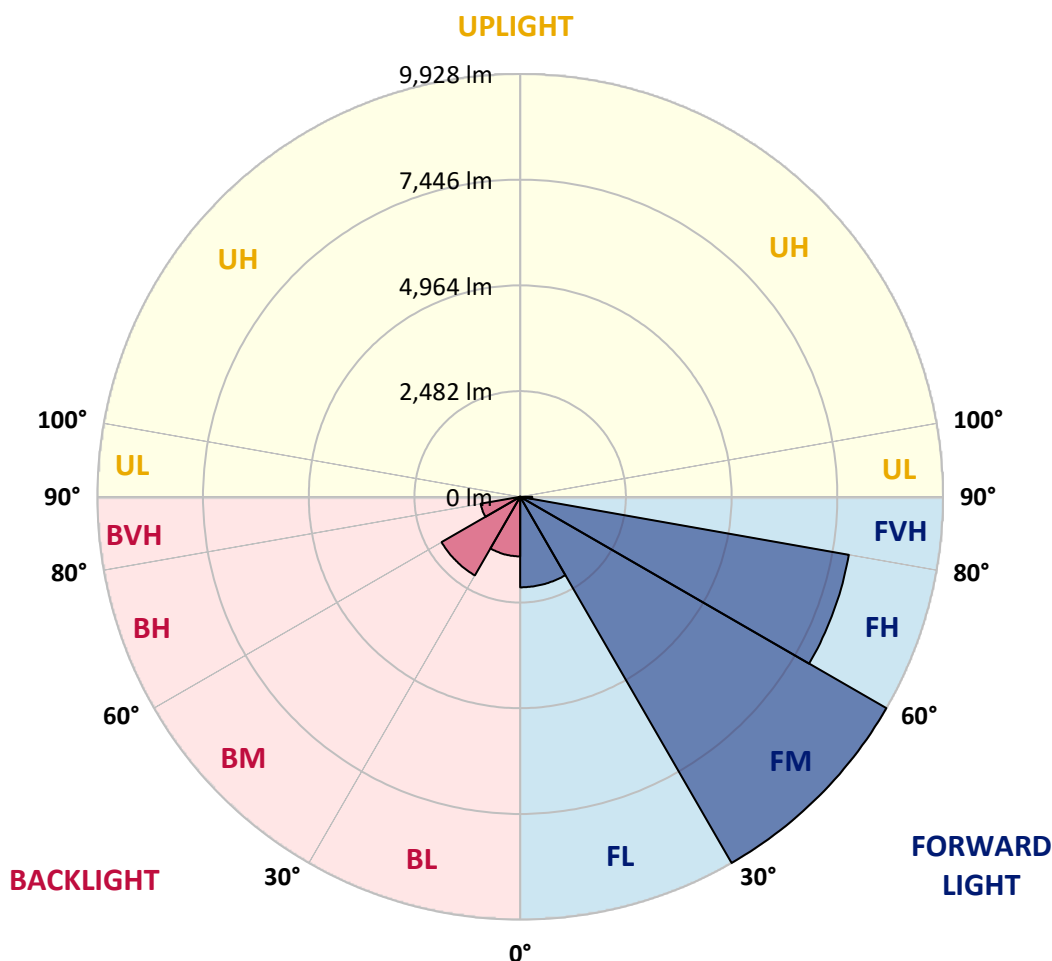
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2125.3	8.6			
FM (30°-60°)	9928.2	40.2			
FH (60°-80°)	7836.1	31.8			G4/12000
FVH (80°-90°)	282.9	1.1			G3/500
BL (0°-30°)	1398.8	5.7	B3/2500		
BM (30°-60°)	2128.4	8.6	B2/2500		
BH (60°-80°)	940.1	3.8	B2/1000		G2/1000
BVH (80°-90°)	27.3	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°	3710.5	3710.5	3710.5	3710.5	3710.5	3710.5	3710.5	3710.5	3710.5	3710.5	3710.5
2.5°	3677.1	3711.7	3691.4	3689.0	3712.9	3690.2	3705.7	3702.1	3699.7	3703.3	3728.4
5°	3773.7	3814.3	3786.9	3778.5	3791.6	3751.0	3747.5	3739.1	3736.7	3737.9	3773.7
7.5°	3908.6	3956.3	3945.6	3924.1	3916.9	3850.1	3838.2	3808.3	3798.8	3801.2	3837.0
10°	4121.0	4168.8	4147.3	4099.5	4069.7	3993.3	3950.4	3912.2	3893.1	3895.5	3933.6
12.5°	4393.1	4438.5	4402.7	4315.6	4298.8	4175.9	4109.1	4027.9	4014.8	3995.7	4036.3
15°	4649.7	4689.1	4672.4	4591.2	4545.9	4400.3	4277.4	4177.1	4165.2	4147.3	4146.1
17.5°	4933.8	4973.2	4942.1	4882.5	4822.8	4649.7	4517.3	4388.4	4357.3	4341.8	4285.7
20°	5236.9	5299.0	5293.0	5244.1	5172.5	4969.6	4782.2	4636.6	4603.2	4574.5	4456.4
22.5°	5549.6	5630.8	5612.8	5586.6	5556.8	5328.8	5110.4	4942.1	4917.1	4856.2	4670.0
25°	5895.7	5951.8	5938.7	5951.8	5931.5	5729.8	5491.1	5285.8	5252.4	5195.1	4909.9
27.5°	6231.1	6289.5	6312.2	6284.8	6297.9	6153.5	5870.6	5686.8	5654.6	5549.6	5198.7
30°	6534.2	6607.0	6639.2	6651.2	6695.3	6546.1	6337.3	6114.1	6103.4	5996.0	5579.4
32.5°	6776.5	6857.6	6936.4	6987.7	7058.1	6992.5	6784.8	6650.0	6651.2	6554.5	6151.1
35°	6951.9	7045.0	7159.6	7295.6	7443.6	7416.2	7293.2	7295.6	7314.7	7346.9	6880.3
37.5°	7146.4	7221.6	7356.5	7546.3	7771.8	7829.1	7812.4	8002.2	8095.2	8152.5	7521.2
40°	7262.2	7338.6	7506.9	7762.3	8090.5	8227.7	8381.7	8714.7	8836.4	8776.7	8069.0
42.5°	7134.5	7202.5	7494.9	7936.5	8351.8	8663.3	8939.0	9426.0	9514.3	9319.7	8530.9
45°	6968.6	7056.9	7364.9	7984.3	8583.4	9090.6	9519.0	10045.4	10111.0	9835.3	8939.0
47.5°	6832.6	6910.1	7269.4	7932.9	8797.0	9528.6	10028.7	10630.2	10646.9	10306.7	9361.5
50°	6658.3	6752.6	7127.4	7869.7	8925.9	9916.5	10495.3	11175.6	11212.6	10794.9	9719.5
52.5°	6475.7	6567.6	6955.5	7765.9	9019.0	10238.7	10979.8	11755.6	11759.2	11311.6	10101.5
55°	6206.0	6303.9	6733.5	7615.5	9047.6	10452.3	11466.8	12347.6	12384.5	11835.6	10447.6
57.5°	5920.8	6004.3	6466.2	7381.6	8941.4	10654.0	11966.8	13005.1	13106.6	12426.3	10744.7
60°	5542.4	5626.0	6114.1	7074.8	8715.8	10880.8	12539.7	13797.6	13808.3	12904.9	10960.7
62.5°	5135.5	5208.3	5657.0	6593.9	8366.2	10967.9	13031.4	14431.3	14430.1	13331.0	11068.2
65°	4652.1	4681.9	5139.0	6003.1	7823.1	10840.2	13248.6	14849.0	14808.5	13637.7	11032.4
67.5°	4079.3	4111.5	4457.6	5269.1	7035.5	10341.3	13151.9	15050.7	15091.3	13911.0	10877.2
70°	3353.6	3391.8	3693.8	4378.8	6031.8	9545.3	12925.2	15137.9	15172.5	13801.2	10398.6
72.5°	2475.2	2526.6	2711.5	3259.3	4578.1	8020.1	11874.9	14184.3	14203.4	12884.6	9402.1
75°	1537.2	1631.5	1805.7	2166.1	2970.5	5624.8	10150.4	12680.5	12561.2	11493.0	7780.2
77.5°	614.6	630.1	717.3	1014.4	1448.9	2928.8	7357.7	10080.0	10307.9	9195.6	5565.1
80°	358.0	355.7	375.9	472.6	621.8	1001.3	2861.9	5654.6	6302.7	5050.7	2503.9
82.5°	288.8	278.1	278.1	303.1	298.4	421.3	938.1	1651.8	1811.7	1607.6	712.5
85°	151.6	148.0	120.5	149.2	149.2	210.0	360.4	467.8	494.1	430.8	267.3
87.5°	38.2	38.2	38.2	46.5	37.0	44.2	60.9	74.0	76.4	62.1	39.4
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°	3710.5	3710.5	3710.5	3710.5	3710.5	3710.5	3710.5	3710.5	3710.5	3710.5	3710.5
2.5°	3737.9	3748.7	3790.4	3784.5	3791.6	3791.6	3803.6	3816.7	3856.1	3833.4	3823.9
5°	3780.9	3802.4	3854.9	3874.0	3902.6	3906.2	3930.1	3938.4	3981.4	3957.5	3957.5
7.5°	3863.2	3888.3	3937.2	3944.4	3957.5	3934.8	3940.8	3914.6	3943.2	3914.6	3915.7
10°	3956.3	3973.0	4006.4	3958.7	3938.4	3884.7	3872.8	3808.3	3831.0	3794.0	3784.5
12.5°	4045.8	4039.9	4014.8	3930.1	3874.0	3785.7	3748.7	3661.5	3656.8	3607.8	3598.3
15°	4130.6	4088.8	4007.6	3876.4	3780.9	3658.0	3569.6	3474.2	3440.7	3384.7	3379.9
17.5°	4234.4	4162.8	4018.4	3825.0	3668.7	3489.7	3364.4	3257.0	3187.7	3136.4	3135.2
20°	4360.9	4251.1	4023.2	3766.6	3552.9	3323.8	3148.4	3012.3	2913.2	2848.8	2847.6
22.5°	4519.6	4370.5	4067.3	3699.7	3404.9	3123.3	2904.9	2669.8	2533.7	2402.4	2378.6
25°	4705.8	4491.0	4105.5	3665.1	3259.3	2914.4	2589.8	2246.1	2034.9	1929.8	1890.4
27.5°	4967.2	4691.5	4161.6	3599.5	3122.1	2656.6	2184.0	1809.3	1555.1	1465.6	1465.6
30°	5269.1	4944.5	4266.6	3560.1	2931.1	2295.0	1738.9	1336.7	1100.4	965.5	961.9
32.5°	5729.8	5246.5	4362.1	3475.4	2699.6	1901.2	1257.9	861.7	671.9	588.4	583.6
35°	6392.2	5821.7	4516.1	3390.6	2364.2	1415.4	798.4	494.1	383.1	335.4	333.0
37.5°	7029.5	6369.5	4847.8	3222.3	1888.1	889.1	442.8	285.2	233.9	228.0	225.6
40°	7478.2	6842.1	5081.8	2965.8	1341.5	471.4	256.6	206.5	202.9	200.5	199.3
42.5°	7967.5	7193.0	5247.6	2638.7	796.0	273.3	208.9	186.2	180.2	177.8	177.8
45°	8365.0	7530.7	5278.7	2170.9	401.0	225.6	191.0	169.5	162.3	167.1	168.3
47.5°	8731.4	7849.4	5173.7	1632.7	270.9	210.0	179.0	157.5	152.8	164.7	164.7
50°	9044.1	8119.1	4932.6	1218.5	254.2	198.1	167.1	145.6	144.4	155.1	156.3
52.5°	9355.5	8336.3	4553.1	920.2	241.1	185.0	155.1	134.9	131.3	138.4	139.6
55°	9602.6	8413.9	4271.4	685.0	231.5	173.1	144.4	124.1	115.8	114.6	117.0
57.5°	9738.6	8345.9	3995.7	503.6	220.8	162.3	133.7	109.8	96.7	96.7	96.7
60°	9741.0	8263.5	3700.9	398.6	208.9	150.4	121.7	94.3	81.2	78.8	78.8
62.5°	9714.8	8116.7	3272.5	346.1	195.7	140.8	106.2	80.0	70.4	66.8	66.8
65°	9599.0	7839.8	2753.3	296.0	180.2	133.7	90.7	71.6	63.3	58.5	58.5
67.5°	9238.6	7320.7	2119.6	257.8	165.9	118.2	82.3	64.4	56.1	51.3	50.1
70°	8577.4	6481.7	1398.7	219.6	151.6	105.0	75.2	58.5	50.1	45.4	44.2
72.5°	7468.7	5275.1	702.9	186.2	130.1	96.7	68.0	51.3	43.0	38.2	38.2
75°	5852.7	3661.5	383.1	148.0	102.6	84.7	59.7	43.0	37.0	33.4	33.4
77.5°	3588.7	1815.3	261.4	114.6	77.6	69.2	47.7	35.8	32.2	31.0	31.0
80°	1309.2	594.3	175.4	81.2	58.5	53.7	38.2	31.0	29.8	29.8	29.8
82.5°	472.6	301.9	118.2	54.9	37.0	40.6	31.0	26.3	25.1	26.3	27.4
85°	194.5	132.5	43.0	31.0	20.3	21.5	19.1	17.9	19.1	20.3	20.3
87.5°	29.8	26.3	15.5	15.5	11.9	10.7	8.4	9.5	11.9	14.3	14.3
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)