

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: P510020

Luminaire Tested: **VERD-M-CA4-190-727-U-T2-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510020
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-CA4-190-727-U-T2-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 2700K, 870mA LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 21421 lumens
Efficiency: N/A
Efficacy: 110.9 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

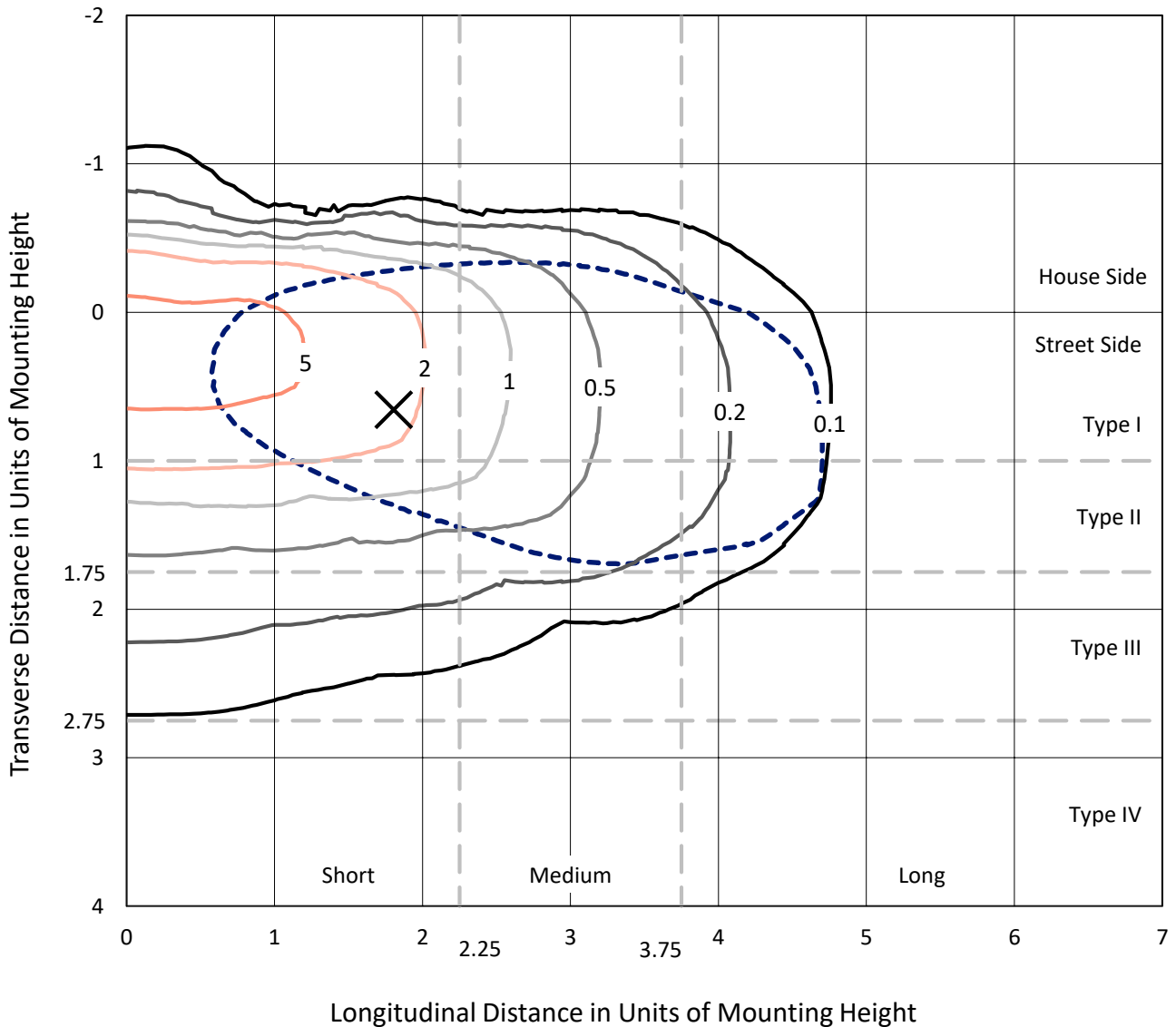
Input Watts (W): 193.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510020
 CATALOG NUMBER: VERD-M-CA4-190-727-U-T2-HSS

Iso-Footcandle Lines of Horizontal Illumination

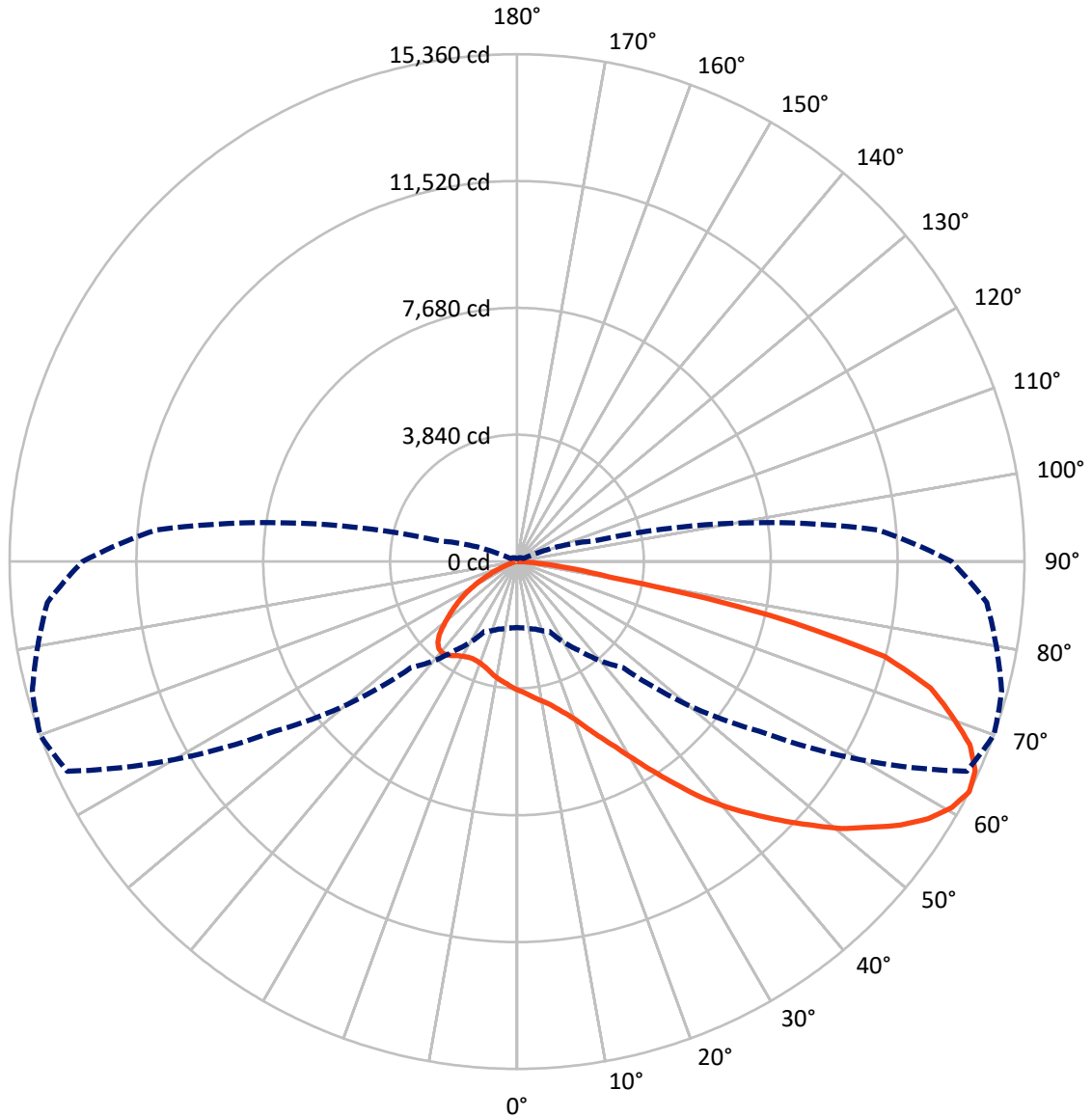
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.4 fc
 Type II - Short - N/A

REPORT NUMBER: P510020
CATALOG NUMBER: VERD-M-CA4-190-727-U-T2-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P510020
 CATALOG NUMBER: VERD-M-CA4-190-727-U-T2-HSS

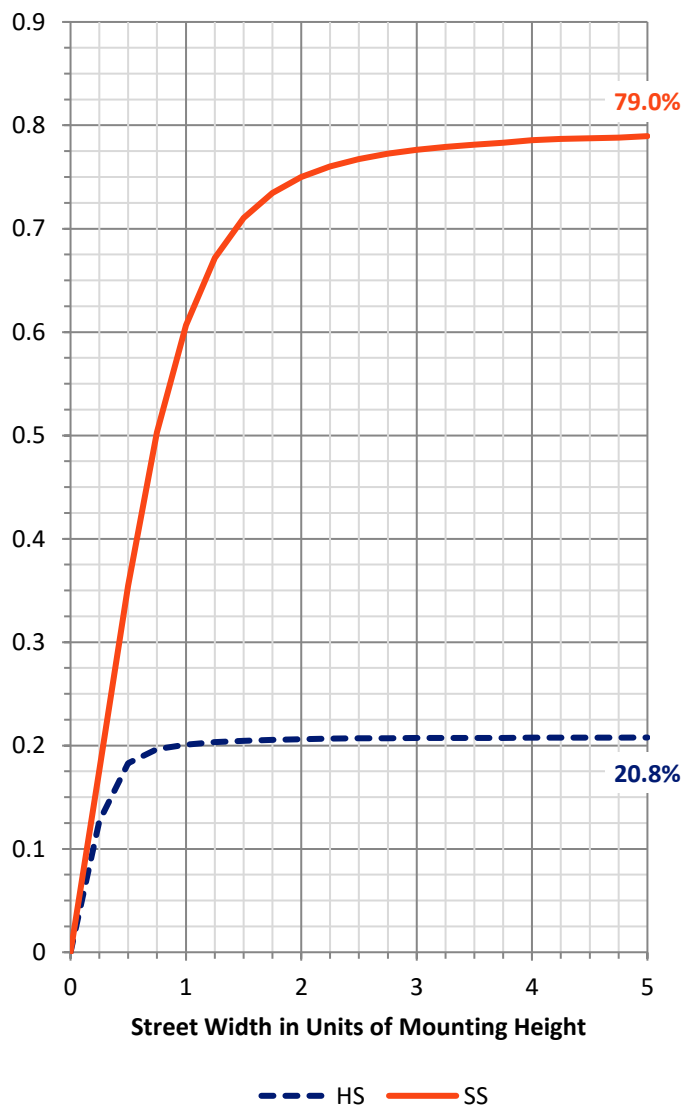
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4504.6	0.0	4504.6
	% Fixture	21.0	0.0	21.0
Street Side	Lumens	16916.4	0.0	16916.4
	% Fixture	79.0	0.0	79.0
Total	Lumens	21421.0	0.0	21421.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	369.7	1.7
10°-20°	1103.4	5.2
20°-30°	1870.6	8.7
30°-40°	2750.8	12.8
40°-50°	3663.2	17.1
50°-60°	4285.2	20.0
60°-70°	4309.9	20.1
70°-80°	2728.2	12.7
80°-90°	340.0	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°	21421.0	100.0
0°-180°	21421.0	100.0



REPORT NUMBER: P510020

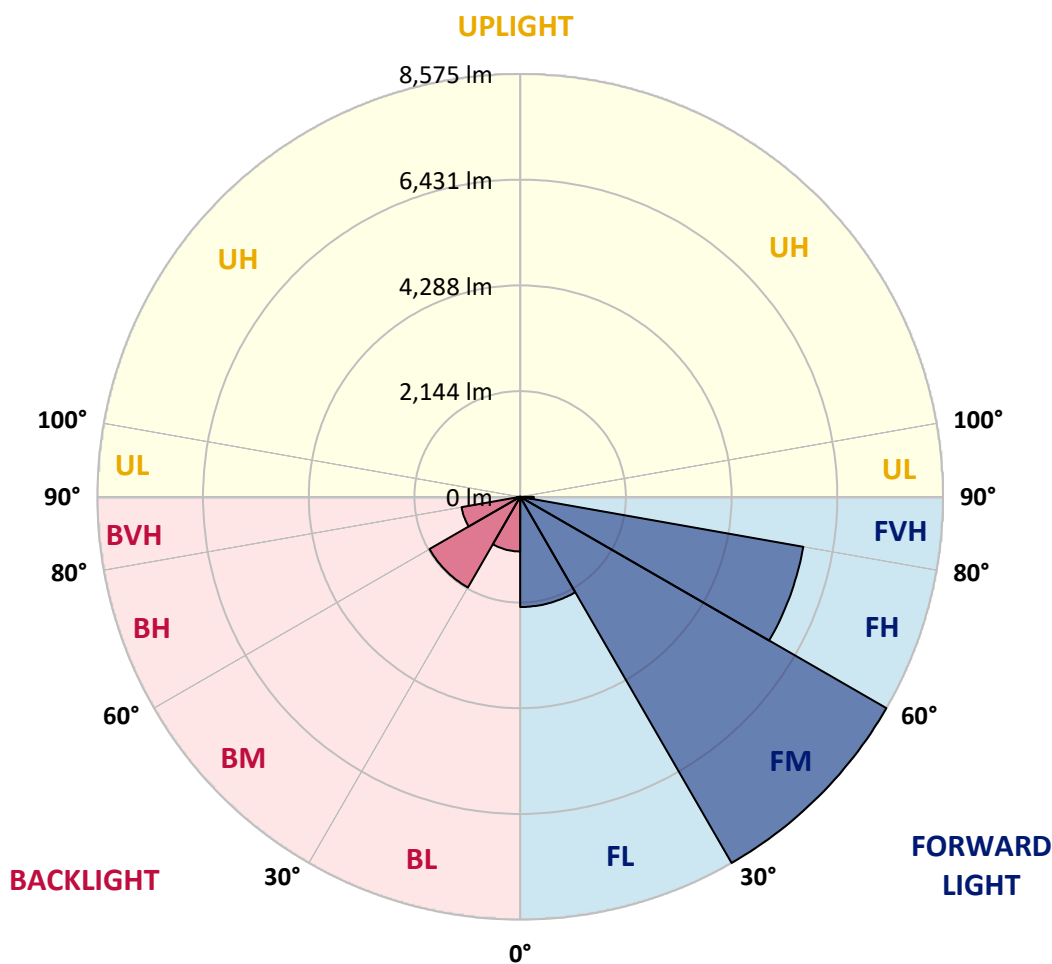
CATALOG NUMBER: VERD-M-CA4-190-727-U-T2-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2234.7	10.4			
FM (30°-60°)	8575.2	40.0			
FH (60°-80°)	5830.8	27.2			G3/7500
FVH (80°-90°)	275.7	1.3			G3/500
BL (0°-30°)	1109.0	5.2	B3/2500		
BM (30°-60°)	2124.0	9.9	B2/2500		
BH (60°-80°)	1207.3	5.6	B3/2500		G3/2500
BVH (80°-90°)	64.3	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





REPORT NUMBER: P510020

CATALOG NUMBER: VERD-M-CA4-190-727-U-T2-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	3894.3	3894.3	3894.3	3894.3	3894.3	3894.3	3894.3	3894.3	3894.3	3894.3	3894.3
2.5°	4108.0	4144.0	4116.5	4105.9	4114.3	4072.0	4038.2	3989.5	3966.2	3949.3	3921.8
5°	4316.4	4375.7	4339.7	4317.5	4314.3	4237.1	4191.6	4124.9	4073.1	4027.6	3957.8
7.5°	4536.5	4571.4	4557.6	4532.2	4515.3	4421.1	4340.7	4246.6	4189.5	4129.2	4011.7
10°	4729.0	4771.3	4757.6	4712.1	4696.2	4599.9	4507.9	4379.9	4301.6	4226.5	4064.6
12.5°	4927.9	4975.5	4946.9	4901.5	4887.7	4790.4	4695.2	4539.6	4442.3	4357.7	4133.4
15°	5110.9	5154.3	5134.2	5082.4	5068.6	4986.1	4881.3	4736.4	4630.6	4518.5	4230.7
17.5°	5256.9	5300.3	5274.9	5250.6	5246.3	5164.9	5102.5	4954.3	4853.8	4701.5	4379.9
20°	5363.8	5408.2	5395.5	5407.1	5451.6	5391.3	5353.2	5228.4	5125.7	4960.7	4594.6
22.5°	5448.4	5505.5	5556.3	5579.6	5662.1	5657.9	5649.4	5575.4	5495.0	5323.6	4850.7
25°	5456.9	5522.5	5623.0	5731.9	5882.2	5954.1	6007.0	5995.4	5901.2	5731.9	5205.1
27.5°	5469.6	5537.3	5641.0	5828.2	6096.9	6265.1	6352.9	6406.9	6351.9	6238.7	5608.2
30°	5442.1	5511.9	5642.0	5881.1	6244.0	6556.1	6712.6	6912.6	6918.9	6823.7	6216.5
32.5°	5317.2	5409.3	5566.9	5887.5	6386.8	6859.7	7100.9	7484.9	7568.5	7497.6	6843.8
35°	5108.8	5192.4	5417.7	5831.4	6473.6	7112.6	7553.7	8152.5	8276.3	8272.1	7582.3
37.5°	4878.2	4962.8	5216.7	5699.1	6529.6	7337.9	7952.6	8814.8	9061.3	9009.4	8279.5
40°	4623.2	4712.1	5005.1	5533.0	6502.1	7538.9	8374.7	9457.0	9762.7	9769.0	8946.0
42.5°	4327.0	4400.0	4694.1	5303.5	6411.1	7687.0	8767.2	10133.0	10454.6	10436.6	9574.4
45°	4043.5	4119.6	4376.7	4948.0	6200.6	7769.5	9152.3	10817.5	11169.8	11112.6	10272.6
47.5°	3700.7	3809.7	4102.7	4649.7	5875.8	7763.2	9488.7	11517.8	11913.5	11866.9	10875.7
50°	2848.0	2912.5	3575.8	4341.8	5435.7	7615.1	9817.7	12205.5	12705.9	12614.9	11518.9
52.5°	2565.5	2623.7	2837.4	3972.6	5035.8	7294.5	10091.7	12992.6	13367.1	13296.2	12175.9
55°	2424.8	2456.5	2586.7	3276.5	4645.4	6774.0	10274.7	13691.9	14081.2	13924.6	12790.5
57.5°	2248.1	2287.3	2438.6	2798.3	4165.1	5975.3	10232.4	14322.4	14682.1	14442.0	13332.2
60°	2112.7	2142.3	2284.1	2519.0	3668.9	5148.0	9799.7	14941.3	15122.2	14885.3	13871.8
62.5°	1998.5	2015.4	2114.8	2338.1	3291.3	4543.9	8955.5	15023.9	15360.3	15188.9	14273.8
65°	1856.7	1860.9	1978.4	2152.9	2942.1	4181.0	8230.8	14600.7	15241.8	15184.7	14418.7
67.5°	1690.6	1699.1	1817.5	1950.8	2522.1	3794.8	7102.0	14373.2	14781.6	14745.6	14132.0
70°	1482.2	1499.1	1608.1	1709.6	2136.0	3331.5	5652.6	13474.0	13958.5	13905.6	13187.3
72.5°	1281.2	1271.6	1373.2	1473.7	1779.5	2781.3	4284.7	11926.2	13093.1	13042.3	11960.0
75°	1052.7	1046.3	1151.0	1246.3	1458.9	2247.1	3014.1	8820.1	11504.1	11660.6	10312.8
77.5°	648.5	653.8	714.1	777.6	988.1	1679.0	1923.3	4906.7	7815.0	9267.6	8093.3
80°	469.7	469.7	514.2	552.2	653.8	1023.0	957.4	2046.1	2856.4	4473.0	5047.4
82.5°	304.7	292.0	319.5	352.3	363.9	443.3	438.0	1026.2	1455.7	1752.0	2102.1
85°	158.7	175.6	105.8	149.2	157.6	147.1	151.3	481.4	646.4	828.4	911.9
87.5°	24.3	19.0	25.4	34.9	40.2	33.9	29.6	56.1	86.8	115.3	136.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P510020

CATALOG NUMBER: VERD-M-CA4-190-727-U-T2-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3894.3	3894.3	3894.3	3894.3	3894.3	3894.3	3894.3	3894.3	3894.3	3894.3	3894.3
2.5°	3903.8	3898.5	3849.9	3779.0	3720.8	3672.1	3640.4	3619.2	3642.5	3600.2	3594.9
5°	3914.4	3878.4	3772.6	3671.1	3592.8	3488.0	3417.2	3369.5	3388.6	3351.6	3336.8
7.5°	3943.0	3877.4	3731.4	3569.5	3421.4	3309.2	3200.3	3095.5	3079.7	3056.4	3057.5
10°	3968.3	3874.2	3683.8	3472.2	3299.7	3101.9	2970.7	2862.8	2838.5	2811.0	2797.2
12.5°	4008.5	3881.6	3624.5	3368.5	3137.9	2909.3	2767.6	2640.6	2616.3	2562.3	2550.7
15°	4089.0	3908.0	3566.3	3240.5	2955.9	2725.3	2542.2	2431.2	2386.7	2326.4	2325.4
17.5°	4193.7	3985.3	3536.7	3119.9	2801.4	2543.3	2349.7	2237.5	2162.4	2126.5	2116.9
20°	4342.9	4085.8	3535.6	3010.9	2640.6	2348.6	2126.5	1999.5	1936.0	1906.4	1888.4
22.5°	4572.4	4233.9	3554.7	2934.7	2478.8	2160.3	1939.2	1764.6	1659.9	1578.5	1590.1
25°	4858.1	4456.1	3598.1	2864.9	2338.1	1980.5	1703.3	1461.0	1273.8	1192.3	1198.6
27.5°	5220.9	4721.6	3710.2	2794.0	2178.3	1786.9	1395.4	1087.6	945.8	850.6	858.0
30°	5685.4	5051.7	3857.3	2739.0	2030.2	1516.0	1050.5	801.9	677.1	598.8	591.4
32.5°	6240.8	5529.9	4018.1	2702.0	1868.3	1177.5	757.5	588.2	466.6	422.1	428.5
35°	6928.5	6067.3	4263.5	2648.0	1591.1	837.9	540.6	397.8	335.4	326.9	328.0
37.5°	7555.8	6617.4	4506.8	2557.0	1255.8	595.6	367.1	302.6	288.8	285.6	289.9
40°	8170.5	7118.9	4726.9	2424.8	863.3	408.4	269.8	272.9	261.3	252.8	248.6
42.5°	8746.0	7602.4	4899.3	2181.5	590.3	269.8	239.1	248.6	246.5	229.6	222.2
45°	9367.0	8113.4	4994.5	1840.8	371.3	229.6	214.8	231.7	242.3	223.2	214.8
47.5°	9897.1	8611.7	4990.3	1410.2	251.8	216.9	202.1	216.9	229.6	215.8	208.4
50°	10508.5	9024.3	4854.9	895.0	223.2	201.0	193.6	198.9	215.8	206.3	198.9
52.5°	11187.7	9589.2	4649.7	499.3	211.6	190.4	179.9	186.2	201.0	189.4	193.6
55°	11750.6	10057.9	4167.2	340.7	206.3	177.7	171.4	175.6	182.0	170.3	176.7
57.5°	12253.1	10445.1	3679.5	279.3	198.9	169.3	168.2	159.7	158.7	151.3	144.9
60°	12762.0	10750.8	3021.5	252.8	191.5	170.3	152.3	140.7	131.2	123.8	120.6
62.5°	13152.3	10962.4	2389.9	228.5	180.9	159.7	139.6	120.6	104.7	95.2	95.2
65°	13266.6	10868.3	1682.1	207.4	169.3	150.2	124.8	98.4	79.3	73.0	69.8
67.5°	12900.6	10327.6	1171.1	191.5	157.6	139.6	110.0	80.4	63.5	55.0	52.9
70°	11968.5	9423.1	690.8	169.3	142.8	121.7	100.5	65.6	51.8	43.4	41.3
72.5°	10591.1	8066.8	430.6	143.9	122.7	99.4	75.1	54.0	41.3	33.9	32.8
75°	8748.1	6288.4	281.4	111.1	97.3	78.3	57.1	43.4	36.0	28.6	26.4
77.5°	7015.2	4448.7	251.8	84.6	71.9	56.1	43.4	36.0	29.6	25.4	25.4
80°	4037.1	2539.1	206.3	58.2	44.4	42.3	33.9	29.6	27.5	24.3	23.3
82.5°	1983.6	1219.8	133.3	36.0	25.4	27.5	28.6	26.4	23.3	21.2	21.2
85°	683.4	406.3	54.0	23.3	16.9	16.9	18.0	19.0	18.0	16.9	16.9
87.5°	105.8	77.2	14.8	13.8	10.6	9.5	10.6	11.6	11.6	10.6	10.6
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)