

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: P510038

Luminaire Tested: **VERD-M-CA4-190-740-U-T3-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510038
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-CA4-190-740-U-T3-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 4000K, 870mA LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25822 lumens
Efficiency: N/A
Efficacy: 133.7 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

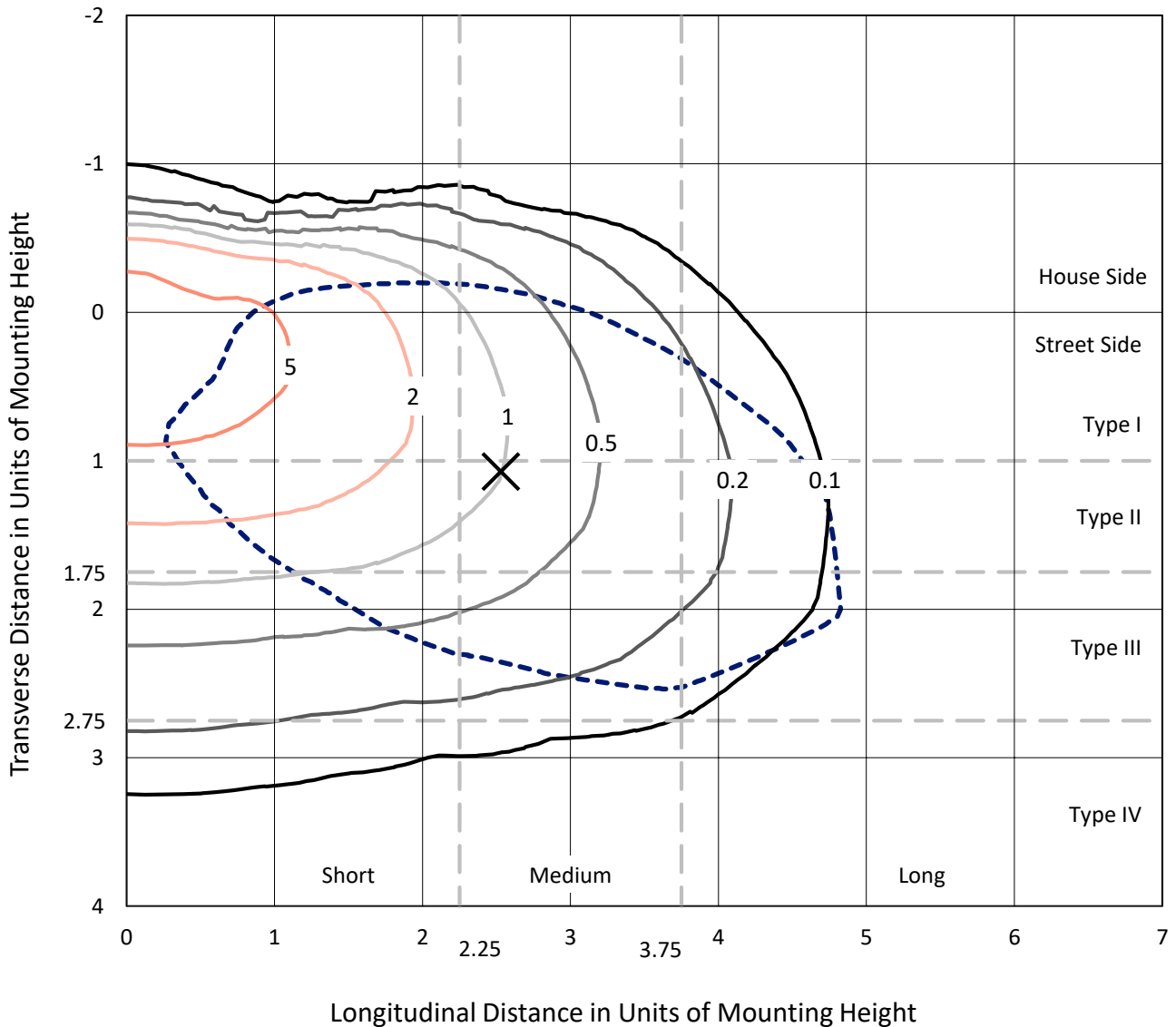
Input Watts (W): 193.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510038
 CATALOG NUMBER: VERD-M-CA4-190-740-U-T3-HSS

Iso-Footcandle Lines of Horizontal Illumination

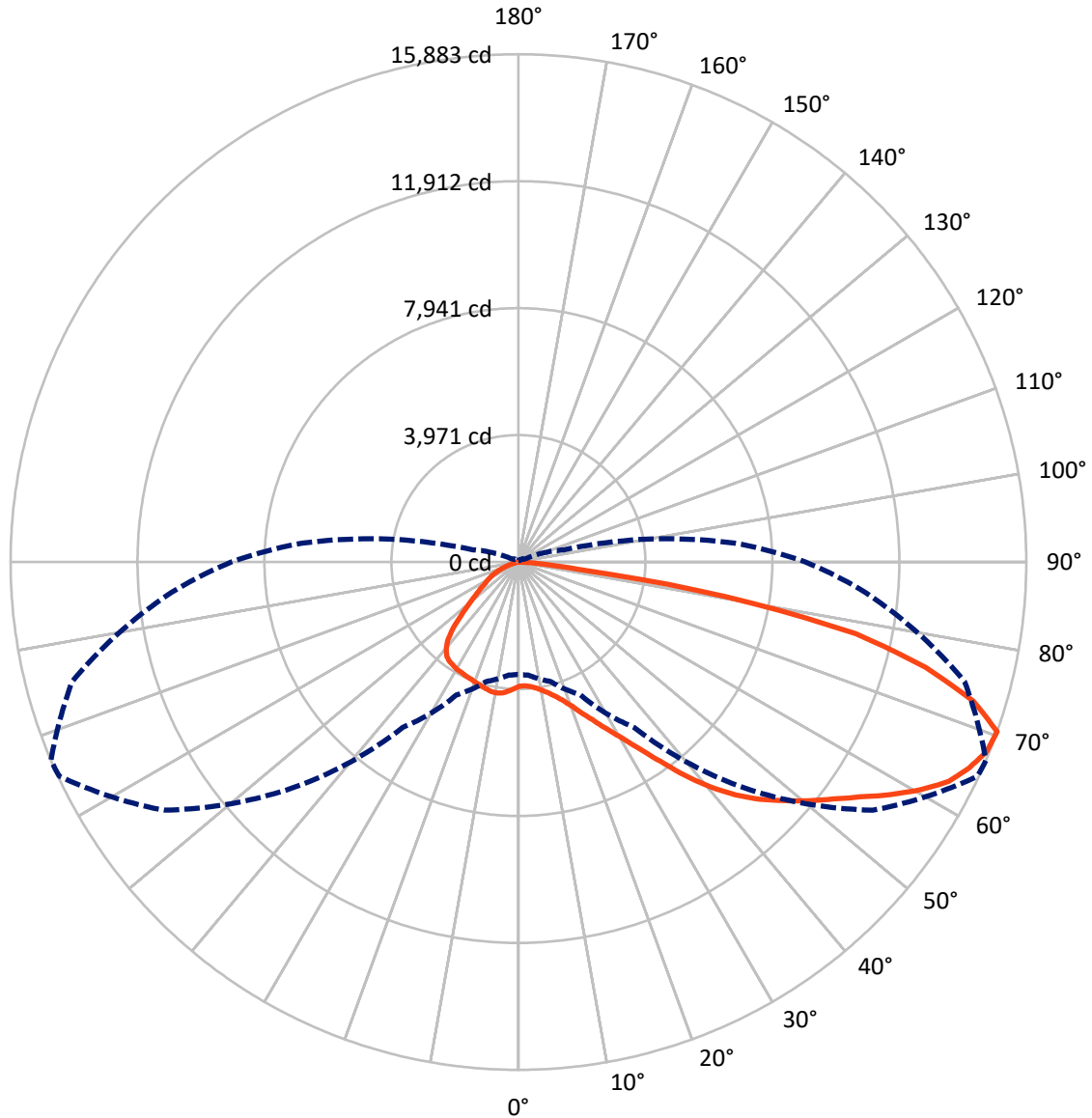
✕ Max cd
 - - - 1/2 Max cd



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

REPORT NUMBER: P510038
CATALOG NUMBER: VERD-M-CA4-190-740-U-T3-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

REPORT NUMBER: P510038
 CATALOG NUMBER: VERD-M-CA4-190-740-U-T3-HSS

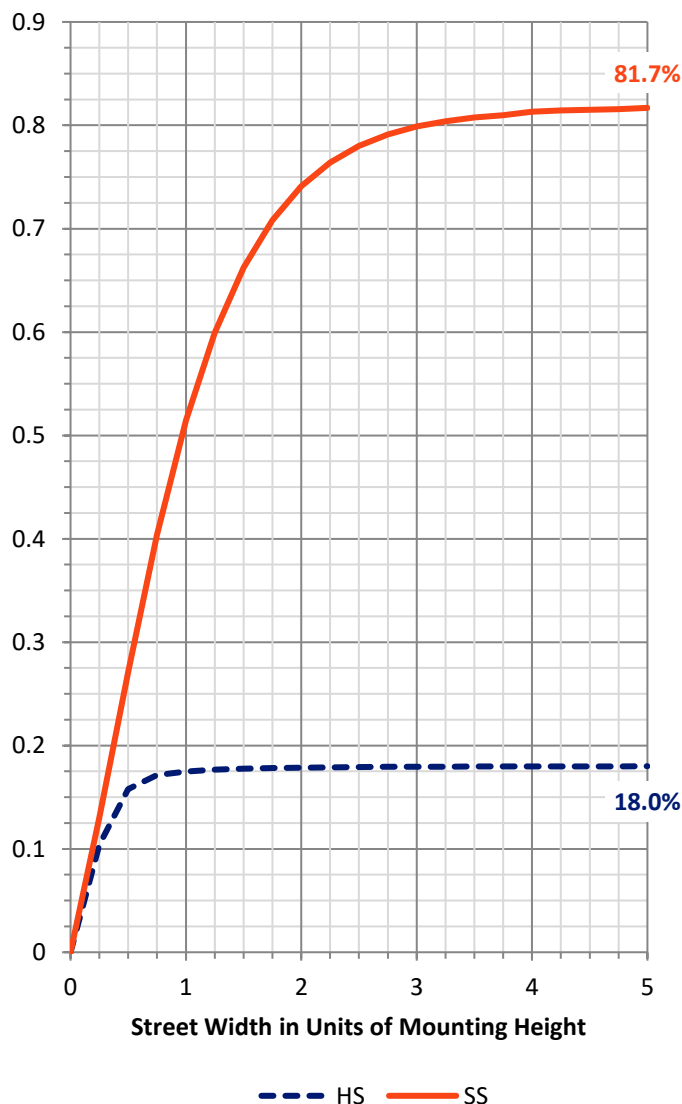
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4705.0	0.0	4705.0
	% Fixture	18.2	0.0	18.2
Street Side	Lumens	21117.0	0.0	21117.0
	% Fixture	81.8	0.0	81.8
Total	Lumens	25822.0	0.0	25822.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	387.0	1.5
10°-20°	1207.3	4.7
20°-30°	2094.7	8.1
30°-40°	3111.1	12.0
40°-50°	4268.3	16.5
50°-60°	5241.7	20.3
60°-70°	5619.7	21.8
70°-80°	3567.5	13.8
80°-90°	324.6	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°	25822.0	100.0
0°-180°	25822.0	100.0



REPORT NUMBER: P510038

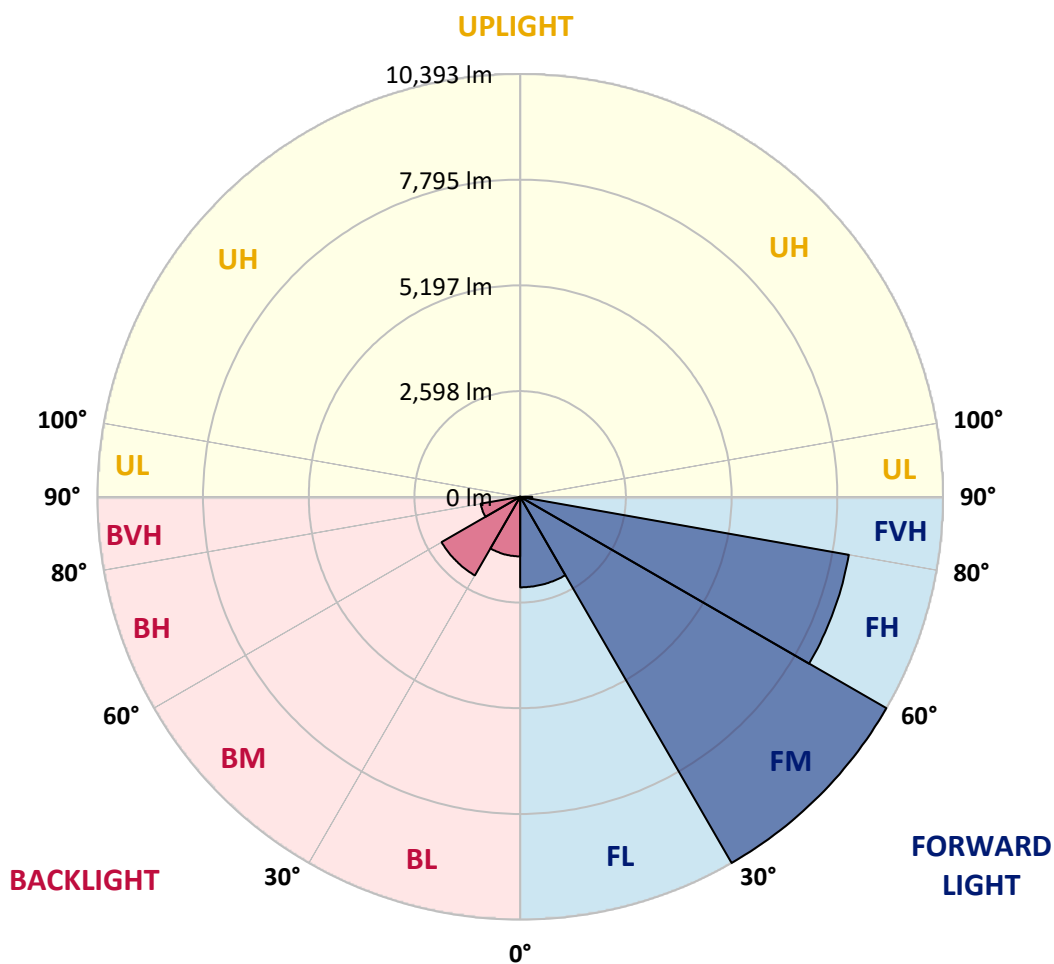
CATALOG NUMBER: VERD-M-CA4-190-740-U-T3-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2224.8	8.6			
FM	(30°-60°)	10393.1	40.2			
FH	(60°-80°)	8203.0	31.8			G4/12000
FVH	(80°-90°)	296.1	1.1			G3/500
BL	(0°-30°)	1464.3	5.7	B3/2500		
BM	(30°-60°)	2228.1	8.6	B2/2500		
BH	(60°-80°)	984.1	3.8	B2/1000		G2/1000
BVH	(80°-90°)	28.5	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





REPORT NUMBER: P510038

CATALOG NUMBER: VERD-M-CA4-190-740-U-T3-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	3884.2	3884.2	3884.2	3884.2	3884.2	3884.2	3884.2	3884.2	3884.2	3884.2	3884.2
2.5°	3849.2	3885.5	3864.2	3861.7	3886.7	3863.0	3879.2	3875.5	3873.0	3876.7	3902.9
5°	3950.4	3992.9	3964.2	3955.4	3969.2	3926.7	3922.9	3914.2	3911.7	3912.9	3950.4
7.5°	4091.6	4141.6	4130.3	4107.8	4100.3	4030.4	4017.9	3986.7	3976.7	3979.2	4016.6
10°	4314.0	4364.0	4341.5	4291.5	4260.3	4180.3	4135.3	4095.3	4075.4	4077.9	4117.8
12.5°	4598.8	4646.3	4608.8	4517.6	4500.1	4371.5	4301.5	4216.5	4202.8	4182.8	4225.3
15°	4867.4	4908.7	4891.2	4806.2	4758.8	4606.3	4477.6	4372.7	4360.2	4341.5	4340.2
17.5°	5164.8	5206.0	5173.5	5111.1	5048.6	4867.4	4728.8	4593.8	4561.4	4545.1	4486.4
20°	5482.1	5547.1	5540.8	5489.6	5414.7	5202.3	5006.1	4853.7	4818.7	4788.7	4665.0
22.5°	5809.4	5894.4	5875.7	5848.2	5816.9	5578.3	5349.7	5173.5	5147.3	5083.6	4888.7
25°	6171.8	6230.5	6216.7	6230.5	6209.2	5998.1	5748.2	5533.3	5498.4	5438.4	5139.8
27.5°	6522.8	6584.0	6607.8	6579.0	6592.8	6441.6	6145.5	5953.1	5919.4	5809.4	5442.1
30°	6840.2	6916.4	6950.1	6962.6	7008.8	6852.7	6634.0	6400.4	6389.1	6276.7	5840.7
32.5°	7093.8	7178.7	7261.2	7314.9	7388.6	7319.9	7102.5	6961.3	6962.6	6861.4	6439.1
35°	7277.4	7374.9	7494.8	7637.2	7792.2	7763.4	7634.7	7637.2	7657.2	7691.0	7202.5
37.5°	7481.1	7559.8	7701.0	7899.6	8135.7	8195.7	8178.2	8376.8	8474.3	8534.3	7873.4
40°	7602.3	7682.2	7858.4	8125.7	8469.3	8613.0	8774.1	9122.7	9250.1	9187.7	8446.8
42.5°	7468.6	7539.8	7845.9	8308.1	8742.9	9069.0	9357.6	9867.3	9959.8	9756.1	8930.3
45°	7294.9	7387.4	7709.7	8358.1	8985.3	9516.3	9964.8	10515.7	10584.4	10295.8	9357.6
47.5°	7152.5	7233.7	7609.8	8304.4	9208.9	9974.8	10498.2	11127.9	11145.4	10789.3	9799.9
50°	6970.1	7068.8	7461.1	8238.2	9343.8	10380.8	10986.7	11698.9	11737.6	11300.3	10174.7
52.5°	6778.9	6875.1	7281.2	8129.5	9441.3	10718.1	11494.0	12306.0	12309.8	11841.3	10574.4
55°	6496.6	6599.0	7048.8	7972.1	9471.3	10941.8	12003.7	12925.7	12964.4	12389.7	10936.8
57.5°	6198.0	6285.4	6768.9	7727.2	9360.1	11152.9	12527.2	13614.1	13720.3	13008.2	11247.8
60°	5802.0	5889.4	6400.4	7406.1	9124.0	11390.3	13126.9	14443.7	14454.9	13509.2	11474.0
62.5°	5375.9	5452.1	5921.9	6902.6	8757.9	11481.5	13641.6	15107.1	15105.8	13955.2	11586.4
65°	4869.9	4901.2	5379.7	6284.2	8189.4	11347.8	13869.0	15544.3	15501.9	14276.3	11548.9
67.5°	4270.3	4304.0	4666.3	5515.9	7364.9	10825.6	13767.8	15755.5	15798.0	14562.3	11386.5
70°	3510.7	3550.6	3866.7	4583.8	6314.2	9992.3	13530.4	15846.7	15882.9	14447.4	10885.5
72.5°	2591.1	2644.9	2838.5	3412.0	4792.5	8395.6	12431.0	14848.4	14868.4	13487.9	9842.3
75°	1609.2	1707.9	1890.3	2267.6	3109.6	5888.2	10625.7	13274.3	13149.3	12031.2	8144.5
77.5°	643.4	659.7	750.9	1061.9	1516.7	3065.9	7702.2	10552.0	10790.6	9626.2	5825.7
80°	374.8	372.3	393.5	494.7	650.9	1048.2	2995.9	5919.4	6597.8	5287.2	2621.1
82.5°	302.3	291.1	291.1	317.3	312.3	441.0	982.0	1729.1	1896.5	1682.9	745.9
85°	158.7	154.9	126.2	156.2	156.2	219.9	377.3	489.7	517.2	451.0	279.9
87.5°	40.0	40.0	40.0	48.7	38.7	46.2	63.7	77.5	80.0	65.0	41.2
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: P510038

CATALOG NUMBER: VERD-M-CA4-190-740-U-T3-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	3884.2	3884.2	3884.2	3884.2	3884.2	3884.2	3884.2	3884.2	3884.2	3884.2	3884.2
2.5°	3912.9	3924.2	3967.9	3961.7	3969.2	3969.2	3981.7	3995.4	4036.6	4012.9	4002.9
5°	3957.9	3980.4	4035.4	4055.4	4085.4	4089.1	4114.1	4122.8	4167.8	4142.8	4142.8
7.5°	4044.1	4070.4	4121.6	4129.1	4142.8	4119.1	4125.3	4097.8	4127.8	4097.8	4099.1
10°	4141.6	4159.1	4194.0	4144.1	4122.8	4066.6	4054.1	3986.7	4010.4	3971.7	3961.7
12.5°	4235.3	4229.0	4202.8	4114.1	4055.4	3962.9	3924.2	3833.0	3828.0	3776.8	3766.8
15°	4324.0	4280.3	4195.3	4057.9	3957.9	3829.2	3736.8	3636.8	3601.9	3543.1	3538.1
17.5°	4432.7	4357.7	4206.5	4004.1	3840.5	3653.1	3521.9	3409.5	3337.0	3283.3	3282.0
20°	4565.1	4450.2	4211.5	3942.9	3719.3	3479.4	3295.8	3153.3	3049.6	2982.2	2980.9
22.5°	4731.3	4575.1	4257.8	3873.0	3564.4	3269.5	3040.9	2794.8	2652.4	2514.9	2489.9
25°	4926.2	4701.3	4297.7	3836.7	3412.0	3050.9	2711.1	2351.3	2130.1	2020.2	1979.0
27.5°	5199.8	4911.2	4356.5	3768.0	3268.3	2781.0	2286.3	1894.0	1627.9	1534.2	1534.2
30°	5515.9	5176.0	4466.4	3726.8	3068.4	2402.5	1820.3	1399.3	1151.9	1010.7	1007.0
32.5°	5998.1	5492.1	4566.4	3638.1	2826.0	1990.2	1316.8	902.0	703.4	615.9	610.9
35°	6691.5	6094.3	4727.5	3549.4	2474.9	1481.7	835.8	517.2	401.0	351.1	348.6
37.5°	7358.6	6667.7	5074.8	3373.2	1976.5	930.8	463.5	298.6	244.9	238.6	236.1
40°	7828.4	7162.5	5319.7	3104.6	1404.3	493.5	268.6	216.1	212.4	209.9	208.6
42.5°	8340.6	7529.8	5493.4	2762.3	833.3	286.1	218.6	194.9	188.7	186.2	186.2
45°	8756.6	7883.4	5525.8	2272.6	419.8	236.1	199.9	177.4	169.9	174.9	176.2
47.5°	9140.2	8216.9	5415.9	1709.1	283.6	219.9	187.4	164.9	159.9	172.4	172.4
50°	9467.5	8499.3	5163.5	1275.6	266.1	207.4	174.9	152.4	151.2	162.4	163.7
52.5°	9793.6	8726.7	4766.2	963.2	252.4	193.6	162.4	141.2	137.4	144.9	146.2
55°	10052.2	8807.9	4471.4	717.1	242.4	181.2	151.2	129.9	121.2	119.9	122.4
57.5°	10194.6	8736.7	4182.8	527.2	231.1	169.9	139.9	114.9	101.2	101.2	101.2
60°	10197.1	8650.5	3874.2	417.3	218.6	157.4	127.4	98.7	85.0	82.5	82.5
62.5°	10169.7	8496.8	3425.7	362.3	204.9	147.4	111.2	83.7	73.7	70.0	70.0
65°	10048.5	8206.9	2882.2	309.8	188.7	139.9	95.0	75.0	66.2	61.2	61.2
67.5°	9671.2	7663.5	2218.8	269.9	173.7	123.7	86.2	67.5	58.7	53.7	52.5
70°	8979.0	6785.2	1464.2	229.9	158.7	109.9	78.7	61.2	52.5	47.5	46.2
72.5°	7818.4	5522.1	735.9	194.9	136.2	101.2	71.2	53.7	45.0	40.0	40.0
75°	6126.8	3833.0	401.0	154.9	107.4	88.7	62.5	45.0	38.7	35.0	35.0
77.5°	3756.8	1900.3	273.6	119.9	81.2	72.5	50.0	37.5	33.7	32.5	32.5
80°	1370.5	622.2	183.7	85.0	61.2	56.2	40.0	32.5	31.2	31.2	31.2
82.5°	494.7	316.1	123.7	57.5	38.7	42.5	32.5	27.5	26.2	27.5	28.7
85°	203.6	138.7	45.0	32.5	21.2	22.5	20.0	18.7	20.0	21.2	21.2
87.5°	31.2	27.5	16.2	16.2	12.5	11.2	8.7	10.0	12.5	15.0	15.0
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)