

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: P510029

Luminaire Tested: **VERD-M-CA4-190-730-U-T2**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510029  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-2)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VERD-M-CA4-190-730-U-T2  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(4) 70 CRI, 3000K, 870mA LEDS AND TYPE II OPTICS  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27146 lumens  
Efficiency: N/A  
Efficacy: 140.6 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

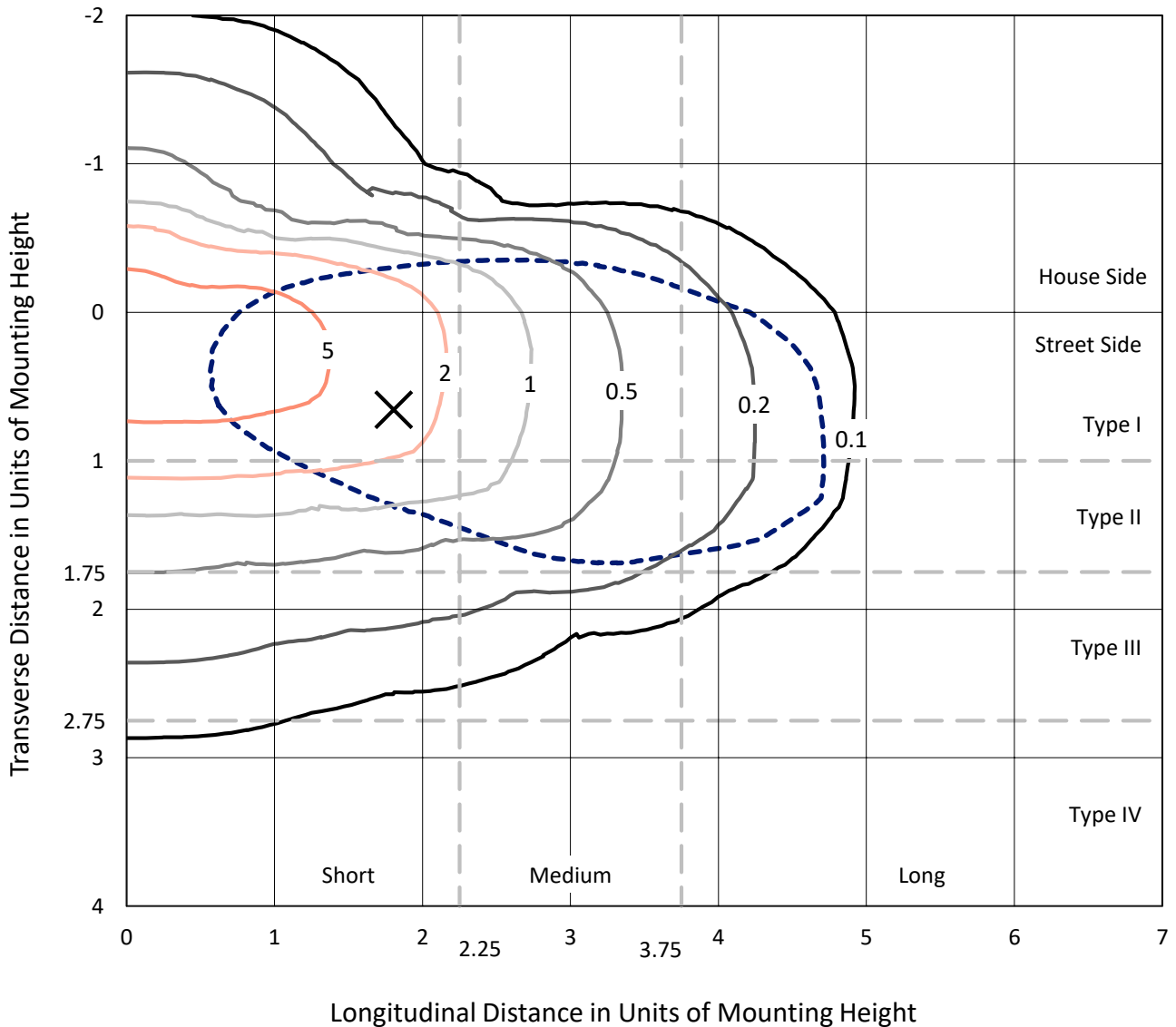
Input Watts (W): 193.1  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P510029  
 CATALOG NUMBER: VERD-M-CA4-190-730-U-T2

### Iso-Footcandle Lines of Horizontal Illumination

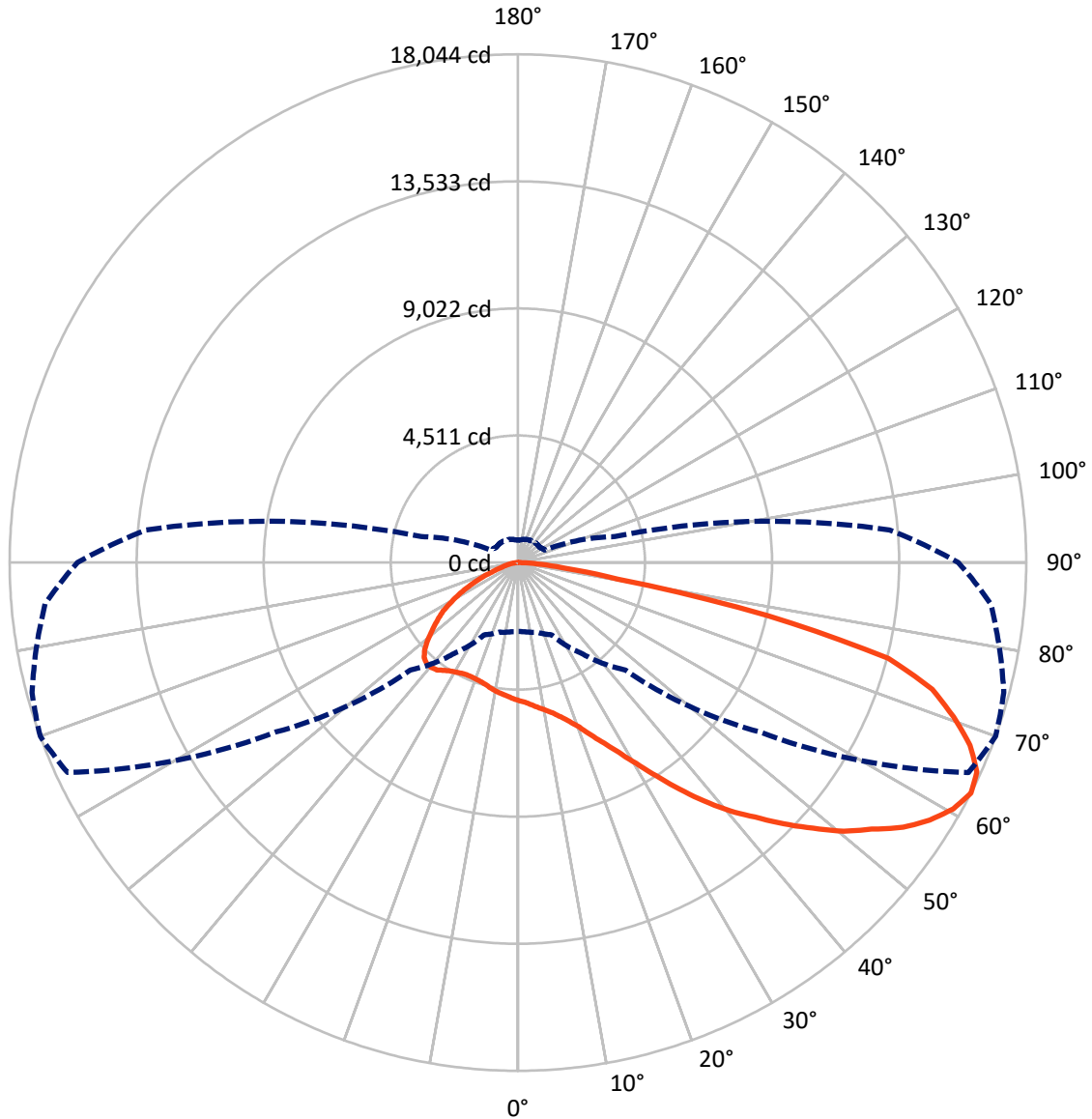
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9 fc  
 Type II - Short - N/A

REPORT NUMBER: P510029  
CATALOG NUMBER: VERD-M-CA4-190-730-U-T2

### Luminous Intensity Polar Plot



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

REPORT NUMBER: P510029

CATALOG NUMBER: VERD-M-CA4-190-730-U-T2

**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	7028.2	0.0	7028.2
	% Fixture	25.9	0.0	25.9
<b>Street Side</b>	Lumens	20117.8	0.0	20117.8
	% Fixture	74.1	0.0	74.1
<b>Total</b>	Lumens	27146.0	0.0	27146.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	470.6	1.7
10°-20°	1429.1	5.3
20°-30°	2425.5	8.9
30°-40°	3509.5	12.9
40°-50°	4605.3	17.0
50°-60°	5381.2	19.8
60°-70°	5400.2	19.9
70°-80°	3441.1	12.7
80°-90°	483.6	1.8
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°	27146.0	100.0
0°-180°	27146.0	100.0

**Coefficient of Utilization**



REPORT NUMBER: P510029

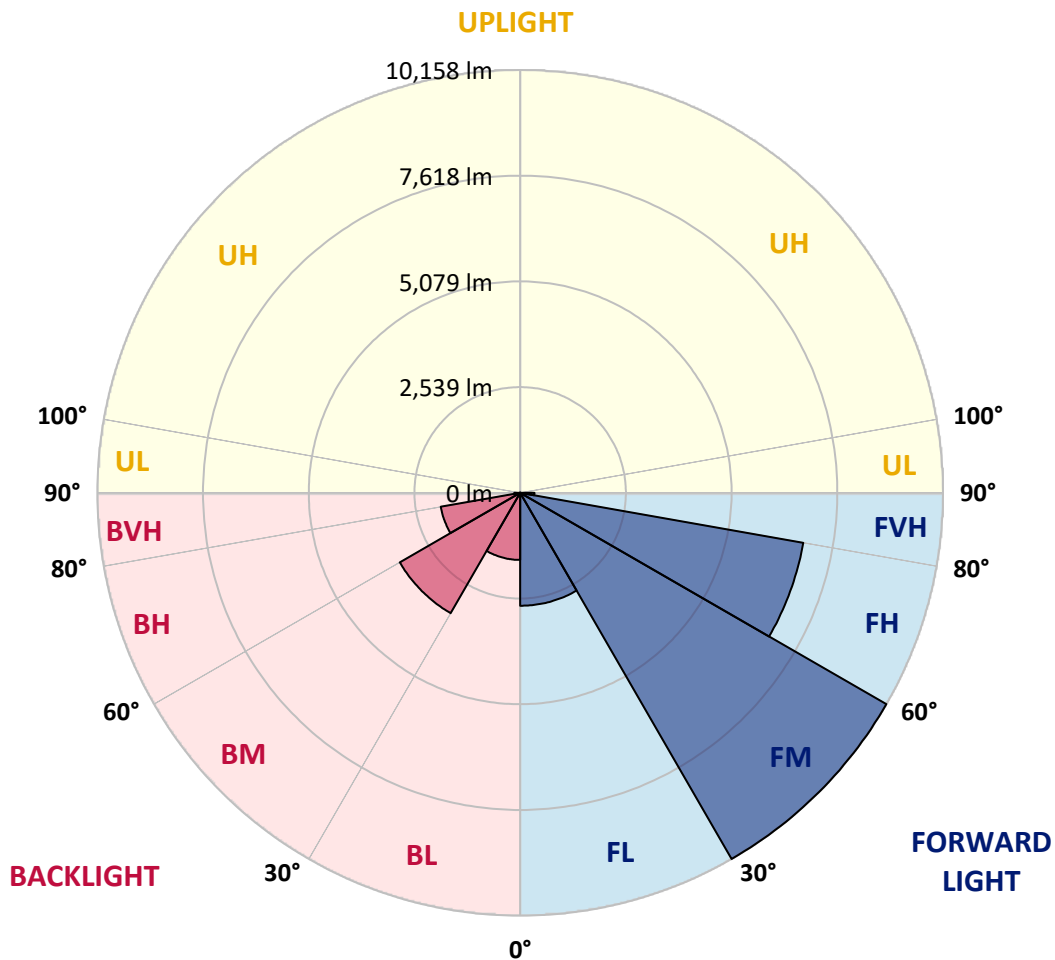
CATALOG NUMBER: VERD-M-CA4-190-730-U-T2

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2713.3	10.0			
FM	(30°-60°)	10157.7	37.4			
FH	(60°-80°)	6905.7	25.4			G3/7500
FVH	(80°-90°)	341.1	1.3			G3/500
BL	(0°-30°)	1611.9	5.9	B3/2500		
BM	(30°-60°)	3338.2	12.3	B3/5000		
BH	(60°-80°)	1935.6	7.1	B3/2500		G3/2500
BVH	(80°-90°)	142.5	0.5			G2/225
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: P510029

CATALOG NUMBER: VERD-M-CA4-190-730-U-T2

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	4899.5	4899.5	4899.5	4899.5	4899.5	4899.5	4899.5	4899.5	4899.5	4899.5	4899.5
2.5°	5087.2	5141.1	5133.8	5100.7	5124.0	5060.2	5036.9	5001.3	4964.5	4952.2	4931.4
5°	5327.6	5398.7	5385.3	5341.1	5339.9	5249.1	5197.6	5130.1	5073.7	5029.5	4964.5
7.5°	5552.1	5634.3	5622.0	5579.1	5576.6	5472.4	5365.6	5260.1	5195.1	5138.7	5019.7
10°	5790.1	5852.6	5841.6	5786.4	5775.3	5673.5	5548.4	5415.9	5320.2	5241.7	5072.4
12.5°	6009.7	6075.9	6080.8	6012.1	5994.9	5885.8	5776.6	5601.2	5477.3	5387.7	5138.7
15°	6214.5	6293.0	6278.3	6209.6	6191.2	6080.8	5974.1	5812.2	5683.3	5558.2	5246.6
17.5°	6378.9	6453.7	6435.3	6404.7	6394.8	6309.0	6220.6	6045.2	5931.1	5770.4	5413.5
20°	6491.7	6561.7	6569.0	6560.4	6616.9	6535.9	6486.8	6362.9	6237.8	6093.1	5641.6
22.5°	6535.9	6619.3	6690.5	6745.7	6862.2	6849.9	6841.4	6770.2	6647.5	6436.5	5943.4
25°	6549.4	6632.8	6743.2	6879.4	7087.9	7162.8	7216.7	7233.9	7100.2	6933.4	6318.8
27.5°	6551.9	6641.4	6754.3	6973.8	7291.6	7517.3	7646.1	7706.2	7631.4	7498.9	6829.1
30°	6500.3	6592.3	6737.1	7030.3	7451.0	7821.5	8034.9	8301.1	8269.2	8157.6	7468.2
32.5°	6351.9	6435.3	6635.3	7020.5	7609.3	8133.1	8465.5	8926.8	9034.7	8962.3	8205.5
35°	6085.7	6187.5	6446.4	6939.5	7695.1	8436.1	8972.2	9689.8	9884.8	9889.7	9109.5
37.5°	5817.1	5894.3	6198.6	6787.4	7743.0	8704.7	9453.0	10454.0	10737.4	10743.5	9861.5
40°	5531.2	5602.4	5937.3	6583.8	7693.9	8915.7	9900.8	11188.8	11594.9	11556.8	10600.0
42.5°	5160.8	5239.3	5571.7	6306.5	7571.3	9078.9	10355.9	11960.4	12350.5	12393.4	11370.4
45°	4844.3	4906.8	5197.6	5873.5	7346.8	9167.2	10782.8	12783.5	13230.1	13184.7	12192.3
47.5°	4454.2	4547.4	4857.8	5521.4	6943.2	9145.1	11191.3	13598.1	14094.9	14053.2	12905.0
50°	3436.0	3544.0	4265.3	5152.2	6428.0	8972.2	11561.7	14377.0	14994.1	14884.9	13659.4
52.5°	3120.7	3151.4	3438.5	4727.7	5920.1	8579.6	11834.1	15360.9	15726.4	15683.5	14423.7
55°	2928.2	2987.0	3118.3	3894.8	5463.8	7941.7	12023.0	16182.8	16594.9	16393.7	15115.5
57.5°	2758.9	2800.6	2956.4	3334.2	4938.7	7063.4	11967.8	16875.8	17243.9	16962.9	15791.4
60°	2578.5	2605.5	2761.3	3043.5	4372.0	6093.1	11407.2	17591.0	17754.2	17496.6	16363.1
62.5°	2438.7	2464.5	2557.7	2828.8	3930.4	5398.7	10489.6	17641.3	18043.7	17856.0	16848.9
65°	2259.6	2276.8	2393.3	2606.8	3520.7	4985.3	9681.2	17169.0	17903.8	17857.2	17035.3
67.5°	2062.1	2083.0	2193.4	2344.2	2996.9	4498.3	8329.4	16913.9	17312.6	17357.9	16685.7
70°	1830.3	1845.0	1959.1	2068.2	2563.8	3948.8	6621.8	15936.2	16401.1	16399.9	15606.2
72.5°	1580.0	1578.8	1691.6	1806.9	2148.0	3317.0	5184.1	14148.9	15379.3	15287.3	14070.4
75°	1302.8	1321.2	1430.3	1521.1	1787.3	2688.9	3610.2	10249.2	13577.2	13703.6	12143.2
77.5°	832.9	845.2	906.5	999.8	1250.0	2054.7	2355.3	5695.6	9065.4	10934.9	9558.5
80°	608.4	614.6	668.6	722.5	831.7	1251.2	1197.3	2475.5	3593.0	5368.1	5863.7
82.5°	414.6	415.9	458.8	471.1	477.2	564.3	568.0	1204.6	1711.3	2015.5	2589.6
85°	274.8	228.2	177.9	235.5	241.7	207.3	202.4	543.4	848.9	1018.2	959.3
87.5°	61.3	60.1	69.9	71.1	68.7	58.9	49.1	83.4	127.6	126.4	161.9
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: P510029

CATALOG NUMBER: VERD-M-CA4-190-730-U-T2

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	4899.5	4899.5	4899.5	4899.5	4899.5	4899.5	4899.5	4899.5	4899.5	4899.5	4899.5
2.5°	4911.7	4905.6	4871.3	4798.9	4749.8	4699.5	4671.3	4654.1	4660.3	4632.1	4619.8
5°	4924.0	4893.3	4796.4	4710.6	4633.3	4546.2	4473.8	4464.0	4478.7	4453.0	4438.2
7.5°	4955.9	4890.9	4767.0	4619.8	4491.0	4408.8	4304.5	4251.8	4248.1	4222.3	4227.2
10°	4974.3	4889.7	4724.1	4546.2	4395.3	4249.3	4137.7	4078.8	4075.1	4038.3	4029.7
12.5°	5024.6	4903.2	4673.8	4456.6	4288.6	4093.5	3975.8	3921.8	3915.7	3864.1	3844.5
15°	5101.9	4933.8	4621.0	4352.4	4135.2	3952.5	3811.4	3739.0	3728.0	3667.9	3647.0
17.5°	5224.6	5020.9	4605.1	4257.9	4001.5	3801.6	3636.0	3557.5	3493.7	3460.5	3432.3
20°	5390.2	5128.9	4623.5	4169.6	3833.5	3602.8	3396.8	3293.7	3249.6	3195.6	3199.3
22.5°	5625.7	5298.2	4655.4	4100.9	3681.4	3390.6	3158.8	3043.5	2963.7	2918.3	2920.8
25°	5956.9	5553.3	4717.9	4035.9	3515.7	3158.8	2885.2	2724.5	2643.6	2614.1	2583.5
27.5°	6375.2	5858.8	4866.4	3956.1	3319.5	2896.3	2593.3	2405.6	2323.4	2279.2	2273.1
30°	6912.5	6259.9	5040.5	3897.3	3113.4	2568.7	2231.4	2083.0	2010.6	1948.0	1918.6
32.5°	7567.6	6826.6	5234.4	3838.4	2858.2	2201.9	1896.5	1782.4	1667.1	1587.4	1591.0
35°	8328.1	7443.7	5522.6	3763.5	2558.9	1859.7	1648.7	1501.5	1393.5	1340.8	1316.3
37.5°	9045.8	8076.7	5861.2	3687.5	2224.0	1637.7	1404.6	1268.4	1185.0	1144.5	1153.1
40°	9772.0	8729.3	6153.2	3501.0	1848.7	1436.5	1162.9	1085.6	1052.5	1020.6	1024.3
42.5°	10422.1	9249.4	6366.6	3293.7	1586.1	1205.9	991.2	1008.4	1028.0	1009.6	1004.7
45°	11099.3	9857.8	6554.3	2940.4	1366.6	1024.3	948.2	996.1	1039.0	1036.6	1030.4
47.5°	11778.9	10422.1	6572.7	2471.8	1166.6	963.0	947.0	982.6	1039.0	1048.8	1041.5
50°	12479.3	11013.4	6464.8	1919.8	1082.0	970.3	948.2	954.4	1016.9	1028.0	1024.3
52.5°	13255.8	11652.5	6198.6	1459.8	1048.8	982.6	951.9	943.3	978.9	998.5	1002.2
55°	13969.8	12160.4	5699.3	1289.3	1024.3	983.8	978.9	950.7	951.9	942.1	966.6
57.5°	14569.6	12644.9	5132.6	1196.0	1002.2	972.8	991.2	938.4	923.7	883.2	873.4
60°	15190.3	13038.7	4335.2	1132.3	976.5	959.3	960.5	917.6	880.8	821.9	804.7
62.5°	15630.7	13247.2	3561.1	1057.4	940.9	938.4	920.0	888.1	855.0	803.5	796.1
65°	15758.3	13136.8	2735.6	978.9	894.3	904.1	871.0	826.8	689.4	625.6	625.6
67.5°	15336.3	12457.2	2025.3	888.1	837.8	857.5	792.5	651.4	580.2	542.2	548.3
70°	14179.5	11359.3	1318.7	755.7	756.9	772.8	653.8	586.4	518.9	495.6	507.9
72.5°	12633.9	9731.5	869.7	602.3	637.9	610.9	597.4	539.8	479.6	452.7	461.2
75°	10411.1	7684.1	603.5	473.5	413.4	521.4	531.2	453.9	407.3	494.4	514.0
77.5°	8225.1	5341.1	498.0	331.2	305.5	385.2	425.7	420.8	673.5	791.2	782.6
80°	4890.9	3075.4	406.0	229.4	215.9	247.8	334.9	483.3	754.4	566.7	539.8
82.5°	2217.9	1398.4	215.9	120.2	141.1	164.4	250.2	601.1	494.4	363.1	342.3
85°	866.1	456.3	85.9	52.7	49.1	61.3	114.1	289.5	198.7	160.7	160.7
87.5°	111.6	82.2	24.5	18.4	15.9	19.6	36.8	160.7	93.2	78.5	76.1
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)