

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: P509901

Luminaire Tested: **VERD-M-CA3-160-750-U-T2**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P509901
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-CA3-160-750-U-T2
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 5000K, 1000mA LEDS AND TYPE II OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 23746 lumens
Efficiency: N/A
Efficacy: 145.9 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

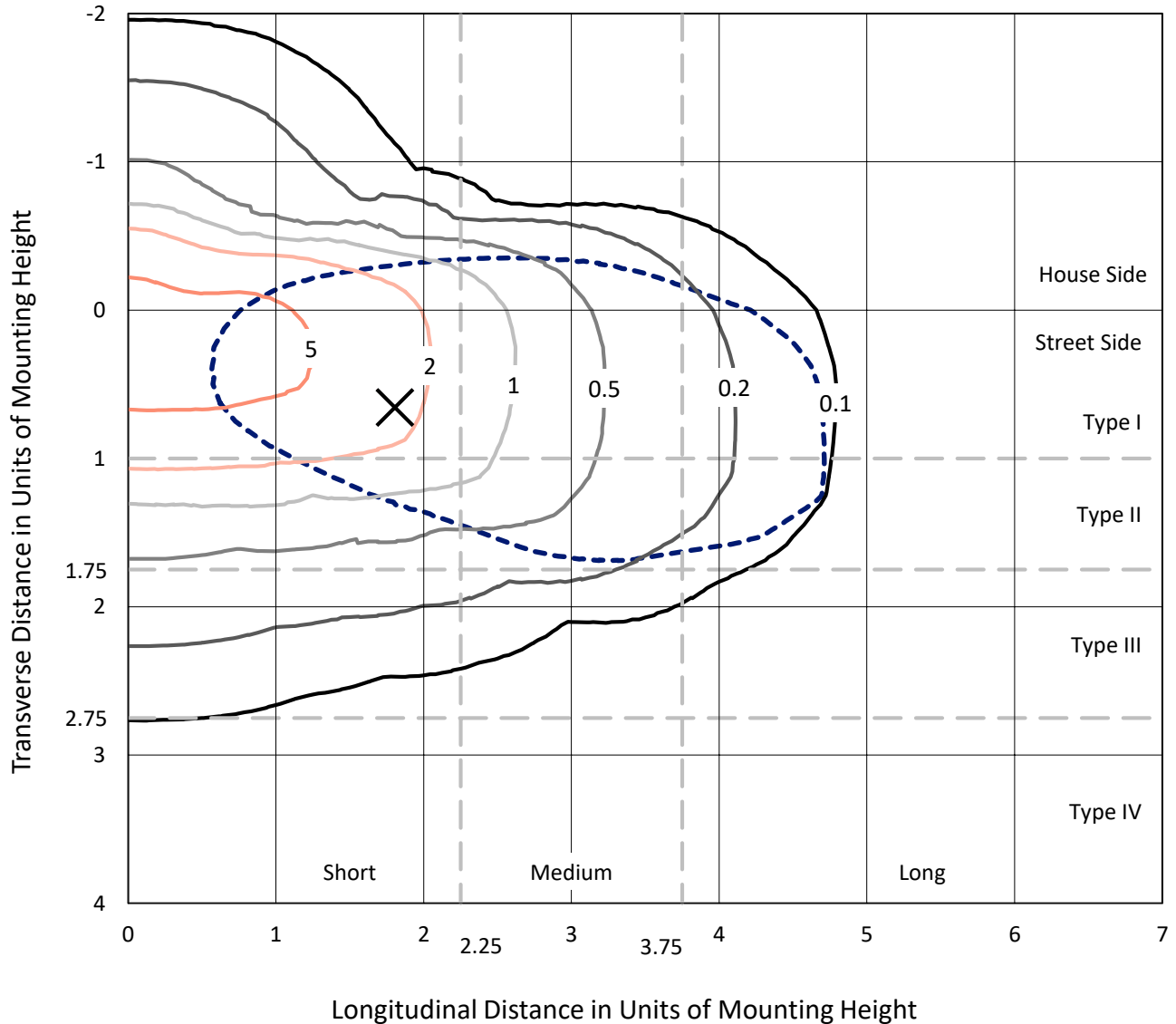
Input Watts (W): 162.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

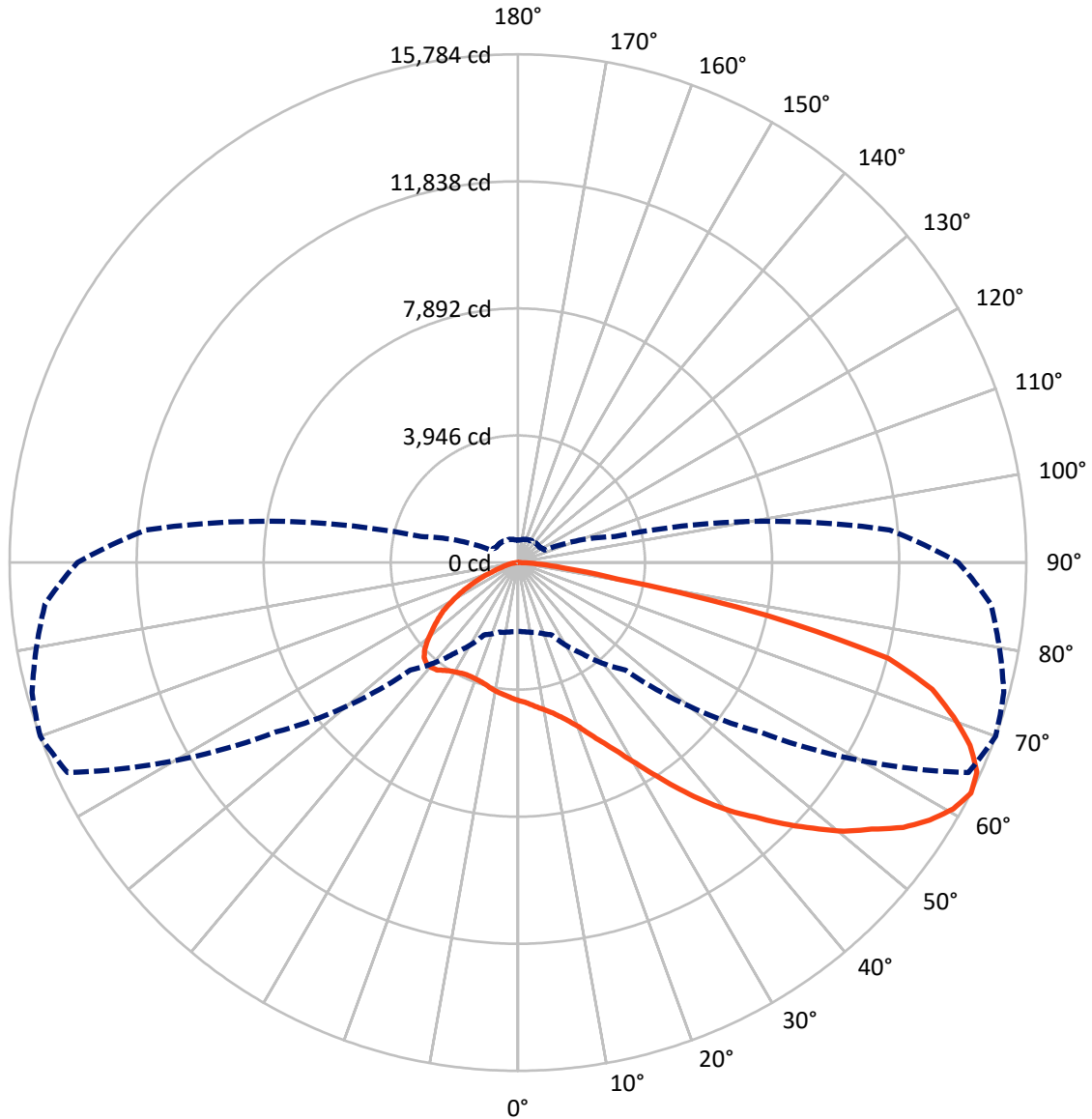
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.8 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	6148.0	0.0	6148.0
	% Fixture	25.9	0.0	25.9
Street Side	Lumens	17598.0	0.0	17598.0
	% Fixture	74.1	0.0	74.1
Total	Lumens	23746.0	0.0	23746.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	411.7	1.7
10°-20°	1250.1	5.3
20°-30°	2121.7	8.9
30°-40°	3069.9	12.9
40°-50°	4028.5	17.0
50°-60°	4707.2	19.8
60°-70°	4723.8	19.9
70°-80°	3010.1	12.7
80°-90°	423.0	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°	23746.0	100.0
0°-180°	23746.0	100.0

Coefficient of Utilization



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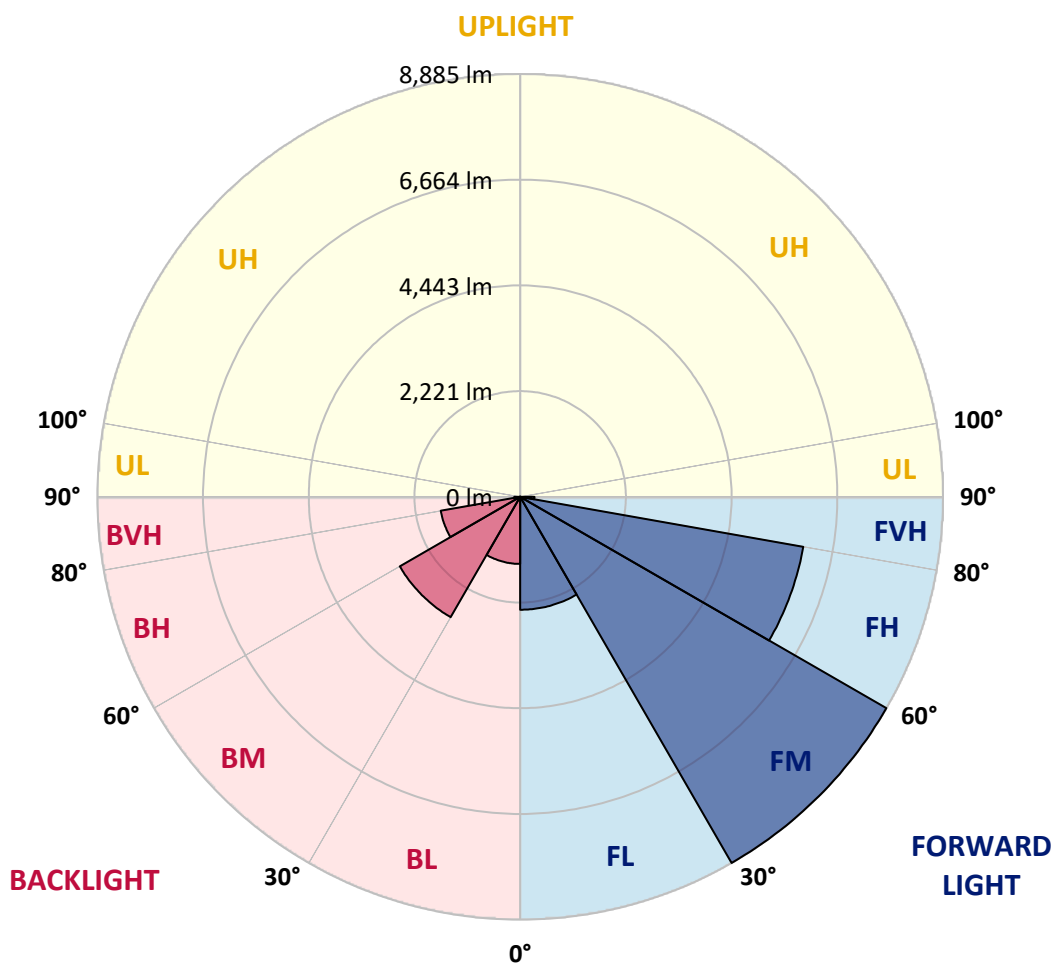
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2373.4	10.0			
FM	(30°-60°)	8885.5	37.4			
FH	(60°-80°)	6040.7	25.4			G3/7500
FVH	(80°-90°)	298.4	1.3			G3/500
BL	(0°-30°)	1410.0	5.9	B3/2500		
BM	(30°-60°)	2920.1	12.3	B3/5000		
BH	(60°-80°)	1693.2	7.1	B3/2500		G3/2500
BVH	(80°-90°)	124.6	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	4285.8	4285.8	4285.8	4285.8	4285.8	4285.8	4285.8	4285.8	4285.8	4285.8	4285.8
2.5°	4450.0	4497.2	4490.8	4461.8	4482.2	4426.4	4406.0	4374.9	4342.7	4332.0	4313.7
5°	4660.3	4722.6	4710.8	4672.1	4671.1	4591.6	4546.6	4487.6	4438.2	4399.6	4342.7
7.5°	4856.7	4928.6	4917.9	4880.3	4878.2	4786.9	4693.6	4601.3	4544.4	4495.1	4391.0
10°	5064.9	5119.6	5109.9	5061.7	5052.0	4962.9	4853.5	4737.6	4653.9	4585.2	4437.1
12.5°	5256.9	5314.9	5319.2	5259.1	5244.1	5148.6	5053.1	4899.6	4791.2	4712.9	4495.1
15°	5436.2	5504.8	5492.0	5431.9	5415.8	5319.2	5225.8	5084.2	4971.5	4862.1	4589.5
17.5°	5579.9	5645.4	5629.3	5602.5	5593.9	5518.8	5441.5	5288.1	5188.3	5047.7	4735.4
20°	5678.7	5739.8	5746.3	5738.8	5788.1	5717.3	5674.4	5566.0	5456.5	5329.9	4935.0
22.5°	5717.3	5790.3	5852.5	5900.8	6002.7	5992.0	5984.5	5922.3	5814.9	5630.4	5199.0
25°	5729.1	5802.1	5898.6	6017.8	6200.2	6265.6	6312.8	6327.9	6210.9	6065.0	5527.4
27.5°	5731.2	5809.6	5908.3	6100.4	6378.3	6575.7	6688.4	6741.0	6675.5	6559.7	5973.8
30°	5686.2	5766.7	5893.3	6149.7	6517.8	6841.9	7028.6	7261.4	7233.5	7135.9	6532.8
32.5°	5556.3	5629.3	5804.2	6141.2	6656.2	7114.4	7405.2	7808.7	7903.1	7839.8	7177.7
35°	5323.5	5412.5	5639.0	6070.3	6731.3	7379.5	7848.4	8476.1	8646.8	8651.1	7968.6
37.5°	5088.5	5156.1	5422.2	5937.3	6773.2	7614.5	8269.0	9144.7	9392.5	9397.9	8626.4
40°	4838.5	4900.7	5193.6	5759.1	6730.3	7799.0	8660.7	9787.4	10142.6	10109.4	9272.4
42.5°	4514.4	4583.1	4873.9	5516.6	6623.0	7941.8	9058.8	10462.4	10803.6	10841.2	9946.2
45°	4237.5	4292.3	4546.6	5137.8	6426.6	8019.0	9432.2	11182.4	11573.0	11533.3	10665.2
47.5°	3896.3	3977.9	4249.3	4829.9	6073.6	7999.7	9789.6	11894.9	12329.5	12293.0	11288.7
50°	3005.7	3100.1	3731.1	4506.9	5622.9	7848.4	10113.6	12576.3	13116.1	13020.6	11948.6
52.5°	2729.9	2756.7	3007.8	4135.6	5178.6	7505.0	10351.9	13436.9	13756.7	13719.1	12617.1
55°	2561.4	2612.9	2727.7	3407.0	4779.4	6947.0	10517.1	14155.9	14516.4	14340.5	13222.3
57.5°	2413.3	2449.8	2586.1	2916.6	4320.2	6178.7	10468.8	14762.2	15084.1	14838.4	13813.6
60°	2255.6	2279.2	2415.5	2662.3	3824.4	5329.9	9978.4	15387.8	15530.5	15305.1	14313.6
62.5°	2133.3	2155.8	2237.3	2474.5	3438.1	4722.6	9175.8	15431.8	15783.7	15619.5	14738.6
65°	1976.6	1991.6	2093.6	2280.3	3079.7	4360.9	8468.6	15018.6	15661.4	15620.6	14901.7
67.5°	1803.8	1822.1	1918.6	2050.6	2621.5	3934.9	7286.1	14795.4	15144.2	15183.9	14595.8
70°	1601.0	1613.9	1713.7	1809.2	2242.7	3454.2	5792.4	13940.2	14346.9	14345.8	13651.5
72.5°	1382.1	1381.0	1479.8	1580.6	1878.9	2901.6	4534.8	12376.7	13453.0	13372.5	12308.1
75°	1139.6	1155.7	1251.2	1330.6	1563.5	2352.2	3158.0	8965.5	11876.7	11987.2	10622.3
77.5°	728.6	739.3	793.0	874.5	1093.5	1797.4	2060.3	4982.2	7930.0	9565.3	8361.3
80°	532.2	537.6	584.8	632.0	727.5	1094.5	1047.3	2165.4	3143.0	4695.7	5129.3
82.5°	362.7	363.8	401.3	412.1	417.4	493.6	496.8	1053.8	1496.9	1763.0	2265.2
85°	240.4	199.6	155.6	206.0	211.4	181.3	177.1	475.4	742.6	890.6	839.1
87.5°	53.7	52.6	61.2	62.2	60.1	51.5	42.9	73.0	111.6	110.5	141.6
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°	4285.8	4285.8	4285.8	4285.8	4285.8	4285.8	4285.8	4285.8	4285.8	4285.8	4285.8
2.5°	4296.6	4291.2	4261.1	4197.8	4154.9	4110.9	4086.2	4071.2	4076.6	4051.9	4041.2
5°	4307.3	4280.5	4195.7	4120.6	4053.0	3976.8	3913.5	3904.9	3917.8	3895.2	3882.4
7.5°	4335.2	4278.3	4169.9	4041.2	3928.5	3856.6	3765.4	3719.2	3716.0	3693.5	3697.8
10°	4351.3	4277.2	4132.4	3976.8	3844.8	3717.1	3619.5	3567.9	3564.7	3532.5	3525.0
12.5°	4395.3	4289.0	4088.4	3898.4	3751.4	3580.8	3477.8	3430.6	3425.2	3380.2	3363.0
15°	4462.9	4315.9	4042.2	3807.2	3617.3	3457.4	3334.0	3270.7	3261.0	3208.5	3190.2
17.5°	4570.2	4392.1	4028.3	3724.6	3500.3	3325.4	3180.6	3111.9	3056.1	3027.1	3002.4
20°	4715.1	4486.5	4044.4	3647.4	3353.3	3151.6	2971.3	2881.2	2842.6	2795.3	2798.6
22.5°	4921.1	4634.6	4072.3	3587.3	3220.3	2966.0	2763.1	2662.3	2592.5	2552.8	2555.0
25°	5210.8	4857.8	4127.0	3530.4	3075.4	2763.1	2523.9	2383.3	2312.5	2286.7	2259.9
27.5°	5576.7	5125.0	4256.9	3460.6	2903.7	2533.5	2268.5	2104.3	2032.4	1993.8	1988.4
30°	6046.7	5475.9	4409.2	3409.1	2723.4	2247.0	1951.9	1822.1	1758.8	1704.0	1678.3
32.5°	6619.7	5971.6	4578.8	3357.6	2500.2	1926.2	1659.0	1559.2	1458.3	1388.5	1391.8
35°	7285.0	6511.4	4830.9	3292.2	2238.4	1626.8	1442.2	1313.4	1219.0	1172.9	1151.4
37.5°	7912.8	7065.1	5127.1	3225.6	1945.5	1432.5	1228.7	1109.6	1036.6	1001.2	1008.7
40°	8548.0	7635.9	5382.5	3062.5	1617.1	1256.6	1017.3	949.7	920.7	892.8	896.0
42.5°	9116.8	8090.9	5569.2	2881.2	1387.5	1054.8	867.0	882.1	899.2	883.1	878.8
45°	9709.1	8623.2	5733.4	2572.1	1195.4	896.0	829.5	871.3	908.9	906.7	901.4
47.5°	10303.6	9116.8	5749.5	2162.2	1020.5	842.4	828.4	859.5	908.9	917.5	911.0
50°	10916.3	9634.0	5655.1	1679.3	946.4	848.8	829.5	834.8	889.6	899.2	896.0
52.5°	11595.6	10193.1	5422.2	1276.9	917.5	859.5	832.7	825.2	856.3	873.5	876.7
55°	12220.1	10637.3	4985.5	1127.8	896.0	860.6	856.3	831.6	832.7	824.1	845.6
57.5°	12744.8	11061.2	4489.7	1046.2	876.7	850.9	867.0	820.9	808.0	772.6	764.0
60°	13287.8	11405.6	3792.2	990.4	854.2	839.1	840.2	802.7	770.5	719.0	703.9
62.5°	13673.0	11588.0	3115.1	925.0	823.0	820.9	804.8	776.9	747.9	702.9	696.4
65°	13784.6	11491.5	2392.9	856.3	782.3	790.8	761.9	723.2	603.1	547.3	547.3
67.5°	13415.5	10897.0	1771.6	776.9	732.9	750.1	693.2	569.8	507.6	474.3	479.7
70°	12403.6	9936.6	1153.5	661.0	662.1	676.0	571.9	512.9	453.9	433.5	444.2
72.5°	11051.5	8512.6	760.8	526.9	558.0	534.4	522.6	472.1	419.6	396.0	403.5
75°	9107.1	6721.7	527.9	414.2	361.6	456.1	464.6	397.0	356.3	432.4	449.6
77.5°	7194.9	4672.1	435.7	289.7	267.2	336.9	372.4	368.1	589.1	692.1	684.6
80°	4278.3	2690.2	355.2	200.7	188.9	216.8	292.9	422.8	659.9	495.8	472.1
82.5°	1940.1	1223.3	188.9	105.2	123.4	143.8	218.9	525.8	432.4	317.6	299.4
85°	757.6	399.2	75.1	46.1	42.9	53.7	99.8	253.2	173.8	140.6	140.6
87.5°	97.6	71.9	21.5	16.1	13.9	17.2	32.2	140.6	81.6	68.7	66.5
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)