

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: P510241

Luminaire Tested: **VERD-M-CA4-230-750-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510241
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-6)
Test Lab: INNOVATION CENTER
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-M-CA4-230-750-U-T4
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 5000K, 1050mA LEDS AND TYPE IV OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 32950 lumens
Efficiency: N/A
Efficacy: 141.2 lumens/watt
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

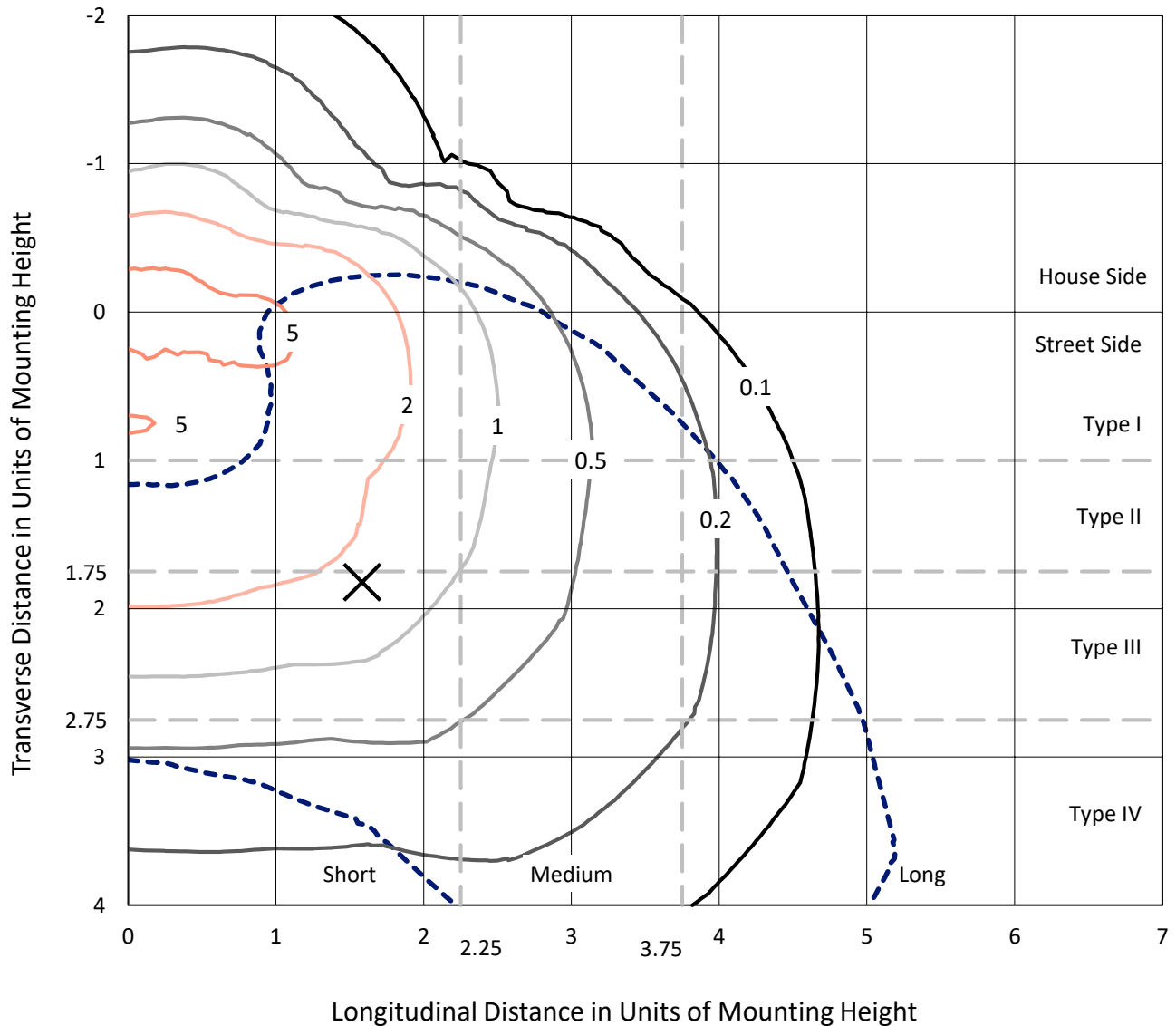
Input Watts (W): 233.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

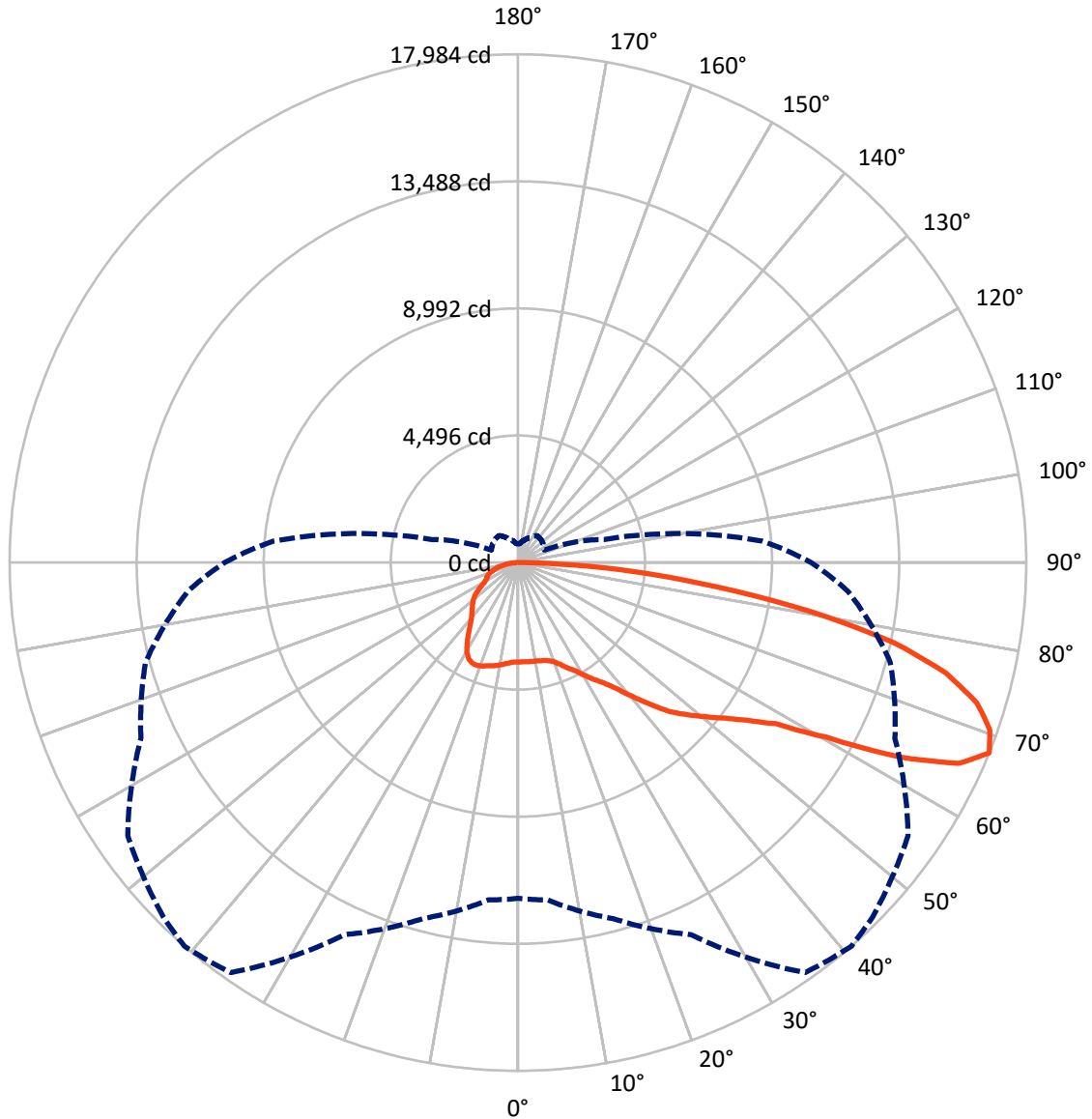
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.9 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 41-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7456.4	0.0	7456.4
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	25493.6	0.0	25493.6
	% Fixture	77.4	0.0	77.4
Total	Lumens	32950.0	0.0	32950.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	339.9	1.0
10°-20°	1054.3	3.2
20°-30°	1885.4	5.7
30°-40°	2956.3	9.0
40°-50°	4584.4	13.9
50°-60°	6462.9	19.6
60°-70°	8238.7	25.0
70°-80°	6165.3	18.7
80°-90°	1262.7	3.8
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°	32950.0	100.0
0°-180°	32950.0	100.0

Coefficient of Utilization



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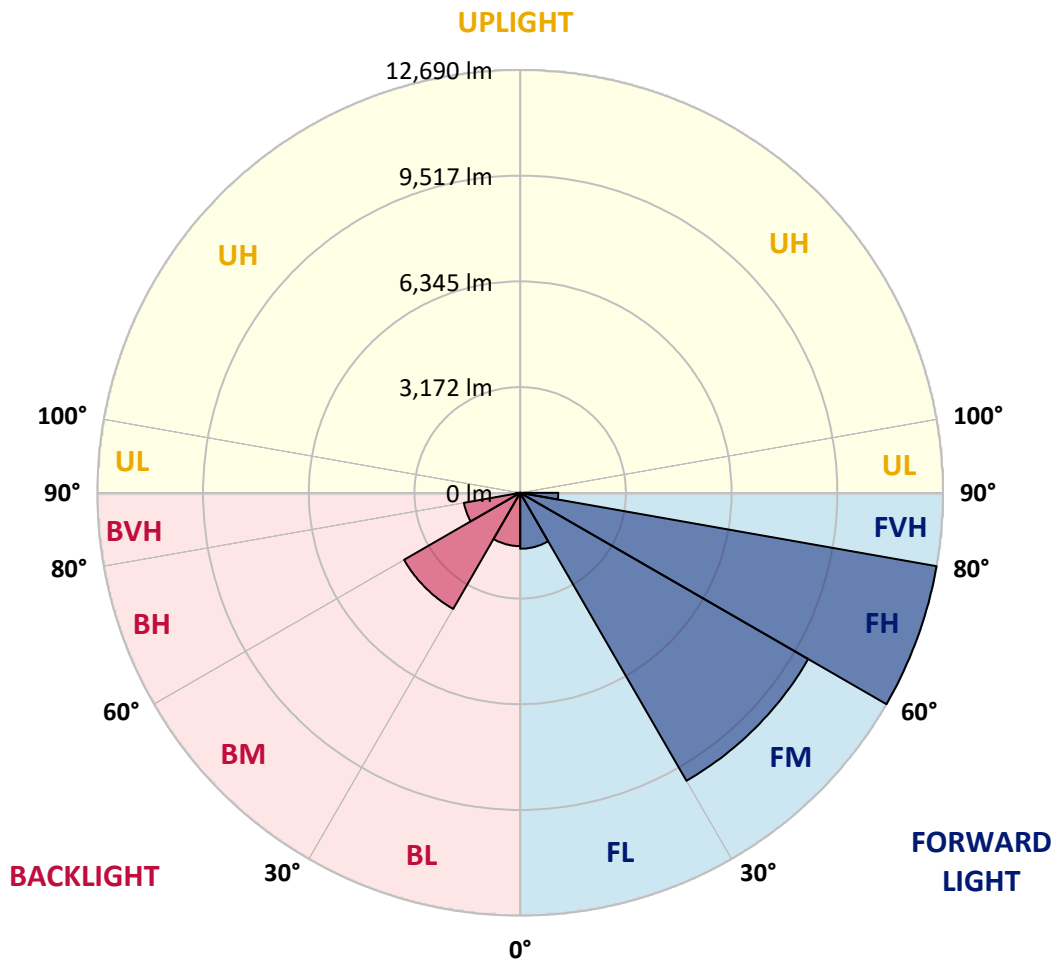
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1678.8	5.1			
FM	(30°-60°)	9980.3	30.3			
FH	(60°-80°)	12689.7	38.5			G5
FVH	(80°-90°)	1144.7	3.5			G5
BL	(0°-30°)	1600.9	4.9	B3/2500		
BM	(30°-60°)	4023.4	12.2	B3/5000		
BH	(60°-80°)	1714.2	5.2	B3/2500		G3/2500
BVH	(80°-90°)	117.9	0.4			G2/225
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5

Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	41°	45°	55°	65°	75°	85°
0°	3518.0	3518.0	3518.0	3518.0	3518.0	3518.0	3518.0	3518.0	3518.0	3518.0	3518.0
2.5°	3474.7	3515.0	3509.0	3501.6	3513.5	3515.0	3480.7	3494.1	3501.6	3513.5	3532.9
5°	3483.7	3523.9	3521.0	3507.5	3516.5	3521.0	3489.6	3513.5	3513.5	3518.0	3540.4
7.5°	3464.3	3503.1	3503.1	3498.6	3518.0	3535.9	3507.5	3528.4	3540.4	3552.3	3567.2
10°	3446.4	3479.2	3491.1	3488.2	3532.9	3537.4	3518.0	3568.7	3588.1	3600.0	3617.9
12.5°	3427.0	3467.3	3483.7	3500.1	3547.8	3564.2	3553.8	3606.0	3646.2	3667.1	3686.5
15°	3418.1	3462.8	3489.6	3513.5	3565.7	3595.5	3595.5	3674.6	3722.3	3749.1	3783.4
17.5°	3480.7	3526.9	3547.8	3567.2	3614.9	3655.2	3652.2	3744.7	3814.7	3856.5	3919.1
20°	3635.8	3691.0	3702.9	3710.4	3740.2	3755.1	3750.6	3850.5	3947.5	4026.5	4096.6
22.5°	3905.7	3938.5	3944.5	3914.7	3922.1	3934.1	3926.6	3981.8	4092.1	4184.6	4309.9
25°	4126.4	4178.6	4163.7	4120.5	4126.4	4142.8	4120.5	4205.5	4284.5	4405.3	4532.1
27.5°	4359.1	4397.8	4381.4	4354.6	4348.6	4336.7	4332.2	4441.1	4557.4	4652.9	4840.8
30°	4642.4	4663.3	4615.6	4603.6	4614.1	4621.5	4593.2	4731.9	4837.8	4975.0	5228.5
32.5°	5119.6	5139.0	5070.4	4887.0	4891.5	4925.8	4901.9	5076.4	5276.2	5443.3	5701.2
35°	5728.1	5728.1	5674.4	5416.4	5221.0	5222.5	5228.5	5474.6	5845.9	6220.2	6485.7
37.5°	6344.0	6364.9	6263.5	6027.8	5780.3	5649.1	5538.7	5854.9	6341.0	7176.1	7571.3
40°	6985.3	7018.1	6866.0	6649.7	6364.9	6215.7	6087.5	6279.9	6936.0	8123.1	8436.3
42.5°	7546.0	7592.2	7435.6	7207.5	7009.1	6840.6	6646.7	6724.3	7590.7	9022.4	9199.8
45°	8067.9	8093.3	7960.6	7772.7	7608.6	7516.2	7380.5	7469.9	8339.4	9902.2	9869.4
47.5°	8452.7	8490.0	8369.2	8267.8	8099.3	8044.1	8042.6	8288.7	9181.9	10603.2	10451.0
50°	9077.6	9049.2	8777.8	8654.0	8551.1	8569.0	8612.3	9037.3	10172.2	11278.7	10940.2
52.5°	10125.9	10073.7	9471.3	9213.3	9086.5	9144.7	9167.0	9715.8	11171.3	11861.8	11344.3
55°	11481.5	11314.5	10876.1	10184.1	9785.9	9841.1	9815.7	10445.1	11970.7	12418.1	11644.1
57.5°	12377.8	12534.4	12324.1	11928.9	10940.2	10759.7	10700.1	11166.9	12710.4	12950.5	11954.3
60°	13156.3	13415.7	13749.8	13496.3	13229.3	12553.8	11997.5	11987.1	13362.1	13305.4	12079.5
62.5°	13978.0	14115.2	14629.7	14786.3	15281.4	15157.6	14411.9	13025.0	14013.8	13564.9	12152.6
65°	13147.3	13330.7	14267.3	15121.8	16954.6	17133.6	16890.5	14954.8	14465.6	13697.6	12048.2
67.5°	11882.7	11984.1	13044.4	14526.8	17712.2	17983.6	17739.0	16848.7	14716.2	13639.4	11726.1
70°	10261.6	10381.0	11393.5	13415.7	17673.4	17709.2	17613.8	17023.2	14616.2	13366.5	10914.8
72.5°	8320.0	8470.6	9360.9	11460.7	16826.4	16981.5	16830.8	16677.2	14335.9	12603.0	9517.5
75°	6294.8	6494.6	7289.5	9137.2	14869.8	15651.2	15670.6	16144.8	13247.2	10804.5	6907.7
77.5°	4293.5	4484.3	5237.5	6961.4	12343.5	13591.7	13916.8	14435.8	11068.4	7984.4	3768.5
80°	2417.4	2399.5	3355.4	4973.5	9414.6	10510.7	10919.3	10898.4	7772.7	4099.6	768.0
82.5°	1117.0	1120.0	1716.5	3175.0	6373.8	7097.1	7262.6	6321.6	2727.6	694.9	244.6
85°	556.3	562.2	826.2	1592.7	3598.5	4157.7	3951.9	2630.7	584.6	202.8	146.1
87.5°	220.7	211.8	326.6	654.7	1298.9	1376.5	1202.0	526.4	105.9	71.6	49.2
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°	3518.0	3518.0	3518.0	3518.0	3518.0	3518.0	3518.0	3518.0	3518.0	3518.0	3518.0
2.5°	3528.4	3531.4	3544.8	3518.0	3525.4	3519.5	3515.0	3538.9	3537.4	3541.8	3534.4
5°	3538.9	3546.3	3559.7	3547.8	3559.7	3553.8	3558.2	3591.1	3595.5	3594.0	3594.0
7.5°	3567.2	3574.7	3600.0	3585.1	3611.9	3604.5	3606.0	3637.3	3643.2	3634.3	3631.3
10°	3626.8	3632.8	3668.6	3665.6	3676.1	3670.1	3664.1	3677.5	3674.6	3661.1	3655.2
12.5°	3695.4	3711.8	3752.1	3753.6	3767.0	3737.2	3705.9	3701.4	3692.5	3671.6	3667.1
15°	3798.3	3817.7	3878.9	3864.0	3855.0	3790.9	3738.7	3696.9	3661.1	3643.2	3626.8
17.5°	3946.0	3978.8	4063.8	4017.6	3951.9	3858.0	3767.0	3676.1	3600.0	3535.9	3510.5
20°	4133.9	4171.2	4242.8	4181.6	4081.7	3941.5	3793.9	3629.8	3464.3	3322.6	3301.7
22.5°	4357.6	4417.2	4469.4	4329.2	4181.6	4004.1	3793.9	3558.2	3283.8	3072.1	3019.9
25°	4618.6	4664.8	4648.4	4451.5	4238.3	4014.6	3752.1	3431.5	3043.7	2797.7	2755.9
27.5°	4901.9	4922.8	4796.0	4509.7	4244.2	3953.4	3634.3	3206.3	2763.4	2569.5	2529.2
30°	5250.9	5188.2	4946.6	4545.5	4184.6	3817.7	3424.0	2876.7	2535.2	2365.2	2319.0
32.5°	5626.7	5511.9	5054.0	4520.1	4053.4	3591.1	3098.9	2644.1	2383.1	2175.8	2137.0
35°	6342.5	6015.9	5210.6	4444.1	3825.2	3288.3	2784.3	2465.1	2222.0	1999.8	1964.0
37.5°	7308.9	6740.7	5429.8	4338.2	3555.3	2994.5	2550.1	2274.2	2064.0	1834.3	1777.6
40°	8060.5	7472.9	5781.8	4224.9	3306.2	2715.7	2380.1	2174.3	1959.6	1715.0	1665.8
42.5°	8776.3	8142.5	6214.3	4098.1	3049.7	2521.8	2305.6	2151.9	1931.2	1682.2	1636.0
45°	9408.6	8683.8	6587.1	3971.3	2760.4	2342.8	2250.4	2108.7	1891.0	1640.4	1595.7
47.5°	9920.1	9149.1	6910.7	3834.1	2497.9	2207.1	2178.8	2029.7	1813.4	1555.4	1501.7
50°	10382.4	9542.8	7134.4	3688.0	2241.4	2096.8	2061.0	1885.0	1659.8	1431.6	1397.3
52.5°	10667.3	9809.8	7268.6	3711.8	1998.3	1973.0	1914.8	1734.4	1525.6	1330.2	1285.5
55°	10965.5	10061.8	7267.1	3577.6	1795.5	1786.6	1731.4	1592.7	1428.7	1264.6	1237.8
57.5°	11087.8	10084.2	7131.4	2946.8	1616.6	1559.9	1548.0	1474.9	1331.7	1176.6	1146.8
60°	11169.8	9985.8	6874.9	2011.8	1391.4	1351.1	1409.3	1360.1	1230.3	1067.8	1037.9
62.5°	11089.3	9878.4	6202.3	1452.5	1219.9	1242.3	1297.4	1243.7	1108.0	960.4	935.0
65°	10896.9	9468.3	4897.4	1131.9	1143.8	1193.0	1236.3	1146.8	897.8	751.6	736.7
67.5°	10372.0	8688.3	3151.1	1037.9	1100.6	1151.3	1166.2	970.8	812.8	672.6	656.2
70°	9266.9	6974.8	1213.9	978.3	1057.3	1079.7	1018.6	890.3	747.1	626.3	611.4
72.5°	7249.2	4579.8	700.9	894.8	964.9	944.0	945.5	799.3	674.1	559.2	547.3
75°	4505.2	1658.3	623.4	796.4	817.2	856.0	806.8	693.5	580.1	511.5	496.6
77.5°	1489.8	471.3	577.1	686.0	732.2	703.9	675.6	592.0	496.6	442.9	435.5
80°	360.9	353.4	517.5	536.9	574.2	526.4	523.4	492.1	419.1	387.7	380.3
82.5°	222.2	253.5	411.6	334.1	383.3	387.7	441.4	405.6	305.7	317.6	307.2
85°	137.2	195.4	216.2	161.1	162.6	217.7	264.0	244.6	183.4	173.0	171.5
87.5°	46.2	40.3	46.2	34.3	46.2	79.0	119.3	113.3	76.1	52.2	49.2
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)