

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: P510185

Luminaire Tested: **VERD-M-CA4-220-740-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510185
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-CA4-220-740-U-T4
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 4000K, 1000mA LEDS AND TYPE IV OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31150 lumens
Efficiency: N/A
Efficacy: 140.0 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

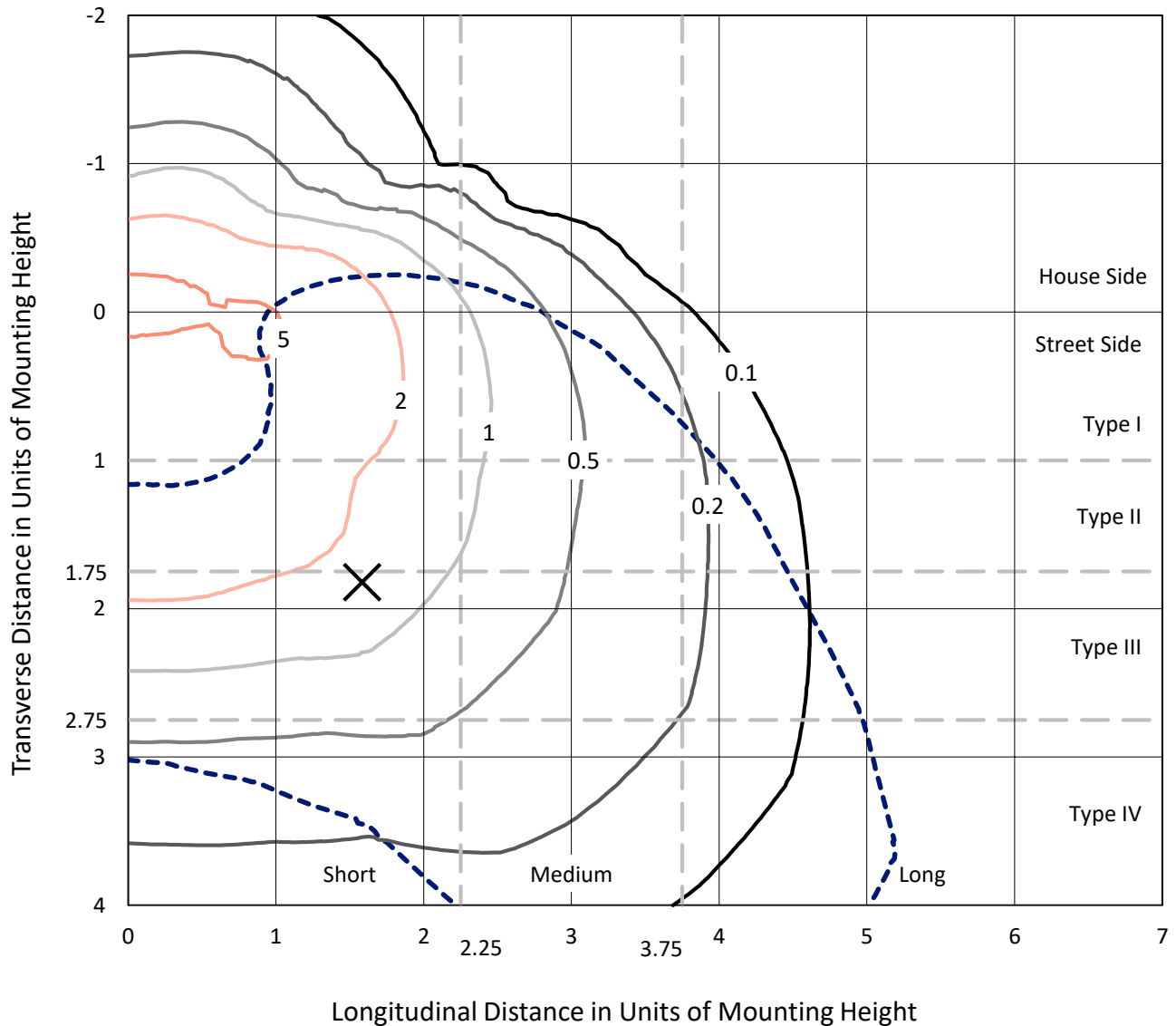
Input Watts (W): 222.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

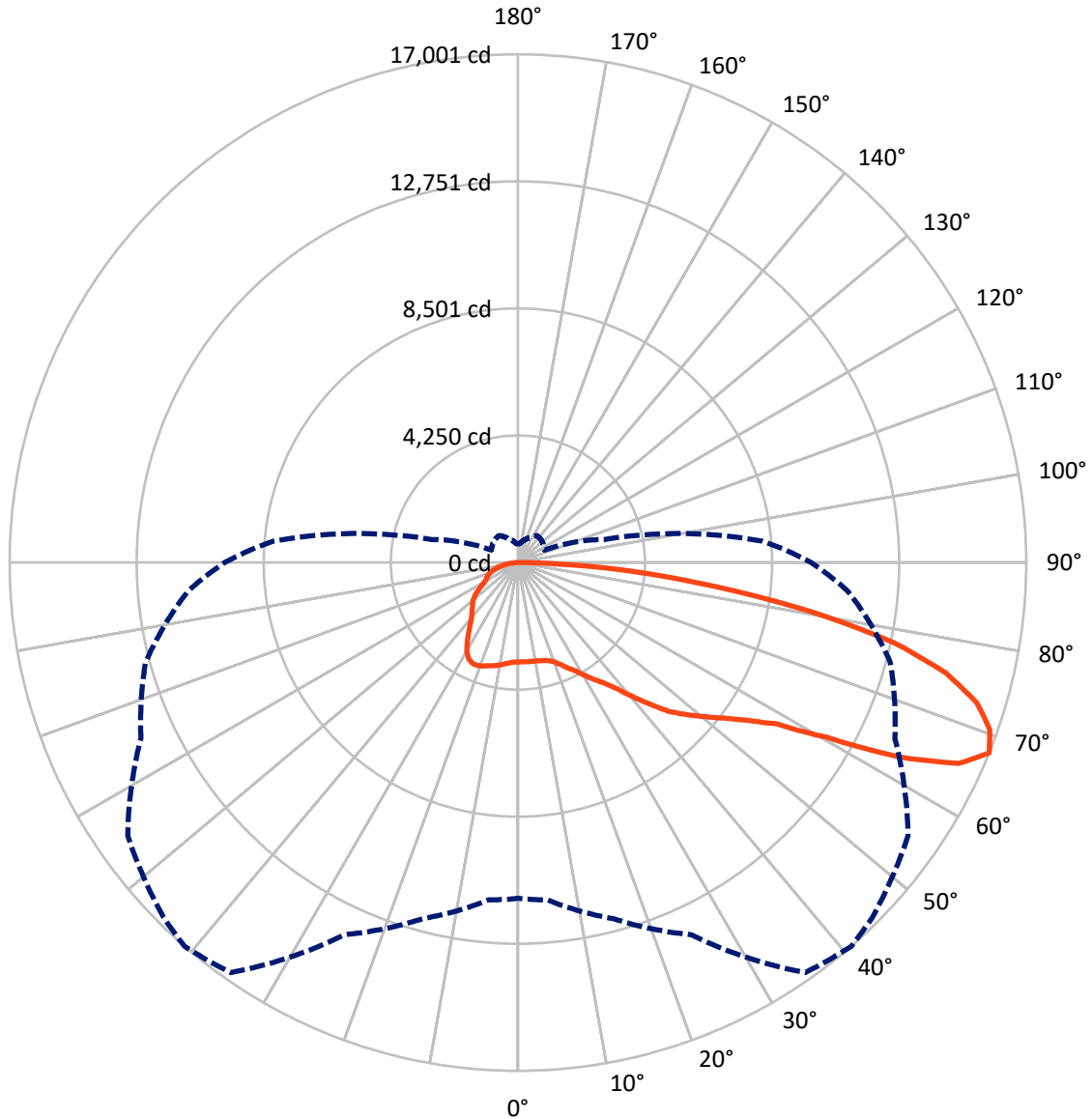
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.6 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	7049.1	0.0	7049.1
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	24100.9	0.0	24100.9
	% Fixture	77.4	0.0	77.4
Total	Lumens	31150.0	0.0	31150.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	321.4	1.0
10°-20°	996.7	3.2
20°-30°	1782.4	5.7
30°-40°	2794.8	9.0
40°-50°	4334.0	13.9
50°-60°	6109.8	19.6
60°-70°	7788.6	25.0
70°-80°	5828.5	18.7
80°-90°	1193.7	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°	31150.0	100.0
0°-180°	31150.0	100.0

Coefficient of Utilization



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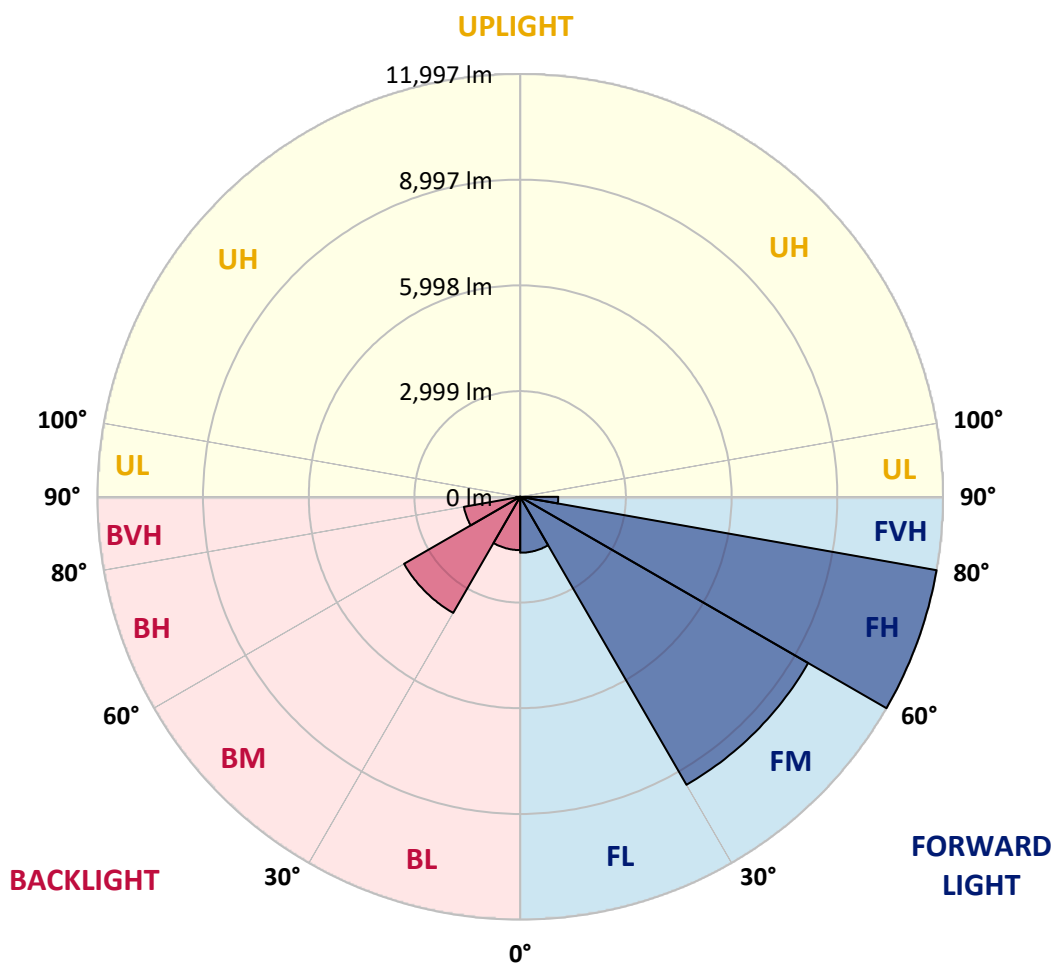
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1587.1	5.1			
FM (30°-60°)	9435.1	30.3			
FH (60°-80°)	11996.5	38.5			G4/12000
FVH (80°-90°)	1082.2	3.5			G5
BL (0°-30°)	1513.4	4.9	B3/2500		
BM (30°-60°)	3803.6	12.2	B3/5000		
BH (60°-80°)	1620.6	5.2	B3/2500		G3/2500
BVH (80°-90°)	111.5	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°	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8
2.5°	3284.9	3323.0	3317.3	3310.3	3321.6	3323.0	3290.6	3303.2	3310.3	3321.6	3339.9
5°	3293.4	3331.4	3328.6	3315.9	3324.4	3328.6	3299.0	3321.6	3321.6	3325.8	3346.9
7.5°	3275.0	3311.7	3311.7	3307.5	3325.8	3342.7	3315.9	3335.7	3346.9	3358.2	3372.3
10°	3258.1	3289.1	3300.4	3297.6	3339.9	3344.1	3325.8	3373.7	3392.1	3403.3	3420.3
12.5°	3239.8	3277.9	3293.4	3308.9	3354.0	3369.5	3359.6	3409.0	3447.0	3466.8	3485.1
15°	3231.3	3273.6	3299.0	3321.6	3370.9	3399.1	3399.1	3473.8	3518.9	3544.3	3576.8
17.5°	3290.6	3334.3	3354.0	3372.3	3417.4	3455.5	3452.7	3540.1	3606.4	3645.8	3705.0
20°	3437.2	3489.3	3500.6	3507.7	3535.9	3550.0	3545.7	3640.2	3731.8	3806.6	3872.8
22.5°	3692.4	3723.4	3729.0	3700.8	3707.9	3719.1	3712.1	3764.3	3868.6	3956.0	4074.4
25°	3901.0	3950.4	3936.3	3895.4	3901.0	3916.5	3895.4	3975.7	4050.5	4164.7	4284.5
27.5°	4120.9	4157.6	4142.1	4116.7	4111.1	4099.8	4095.6	4198.5	4308.5	4398.7	4576.3
30°	4388.8	4408.6	4363.4	4352.2	4362.0	4369.1	4342.3	4473.4	4573.5	4703.2	4942.9
32.5°	4840.0	4858.3	4793.4	4620.0	4624.3	4656.7	4634.1	4799.1	4988.0	5145.9	5389.8
35°	5415.2	5415.2	5364.4	5120.5	4935.8	4937.2	4942.9	5175.5	5526.6	5880.4	6131.4
37.5°	5997.4	6017.2	5921.3	5698.6	5464.5	5340.5	5236.1	5535.0	5994.6	6784.1	7157.7
40°	6603.7	6634.7	6490.9	6286.5	6017.2	5876.2	5754.9	5936.8	6557.1	7679.4	7975.4
42.5°	7133.8	7177.5	7029.4	6813.7	6626.2	6466.9	6283.6	6356.9	7176.1	8529.5	8697.3
45°	7627.2	7651.2	7525.7	7348.1	7193.0	7105.6	6977.3	7061.9	7883.8	9361.3	9330.3
47.5°	7990.9	8026.2	7912.0	7816.1	7656.8	7604.6	7603.2	7835.9	8680.4	10023.9	9880.1
50°	8581.7	8554.9	8298.3	8181.3	8084.0	8100.9	8141.8	8543.6	9616.5	10662.6	10342.5
52.5°	9572.8	9523.4	8953.9	8710.0	8590.1	8645.1	8666.3	9185.1	10561.1	11213.8	10724.6
55°	10854.3	10696.4	10281.9	9627.8	9251.3	9303.5	9279.5	9874.5	11316.7	11739.7	11008.0
57.5°	11701.6	11849.7	11650.9	11277.3	10342.5	10172.0	10115.6	10556.8	12016.0	12243.0	11301.2
60°	12437.6	12682.9	12998.7	12759.0	12506.6	11868.0	11342.1	11332.2	12632.1	12578.5	11419.7
62.5°	13214.4	13344.1	13830.5	13978.5	14446.6	14329.6	13624.6	12313.5	13248.2	12823.9	11488.7
65°	12429.1	12602.5	13487.9	14295.7	16028.4	16197.6	15967.8	14137.8	13675.4	12949.3	11390.1
67.5°	11233.6	11329.4	12331.8	13733.2	16744.6	17001.2	16770.0	15928.3	13912.2	12894.3	11085.5
70°	9701.1	9813.9	10771.1	12682.9	16707.9	16741.8	16651.6	16093.3	13817.8	12636.3	10318.6
72.5°	7865.5	8007.9	8849.5	10834.6	15907.2	16053.8	15911.4	15766.2	13552.7	11914.5	8997.6
75°	5950.9	6139.8	6891.3	8638.1	14057.5	14796.2	14814.5	15262.9	12523.6	10214.3	6530.4
77.5°	4058.9	4239.4	4951.3	6581.1	11669.2	12849.2	13156.6	13647.2	10463.8	7548.3	3562.7
80°	2285.3	2268.4	3172.1	4701.8	8900.3	9936.5	10322.8	10303.1	7348.1	3875.6	726.1
82.5°	1056.0	1058.8	1622.7	3001.5	6025.6	6709.4	6865.9	5976.3	2578.6	657.0	231.2
85°	525.9	531.5	781.0	1505.7	3401.9	3930.6	3736.1	2486.9	552.7	191.7	138.2
87.5°	208.7	200.2	308.8	618.9	1228.0	1301.3	1136.3	497.7	100.1	67.7	46.5
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°	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8	3325.8
2.5°	3335.7	3338.5	3351.2	3325.8	3332.8	3327.2	3323.0	3345.5	3344.1	3348.4	3341.3
5°	3345.5	3352.6	3365.3	3354.0	3365.3	3359.6	3363.9	3394.9	3399.1	3397.7	3397.7
7.5°	3372.3	3379.4	3403.3	3389.2	3414.6	3407.6	3409.0	3438.6	3444.2	3435.8	3432.9
10°	3428.7	3434.4	3468.2	3465.4	3475.2	3469.6	3464.0	3476.7	3473.8	3461.1	3455.5
12.5°	3493.6	3509.1	3547.1	3548.6	3561.2	3533.0	3503.4	3499.2	3490.8	3471.0	3466.8
15°	3590.8	3609.2	3667.0	3652.9	3644.4	3583.8	3534.5	3495.0	3461.1	3444.2	3428.7
17.5°	3730.4	3761.4	3841.8	3798.1	3736.1	3647.2	3561.2	3475.2	3403.3	3342.7	3318.8
20°	3908.1	3943.3	4011.0	3953.2	3858.7	3726.2	3586.6	3431.5	3275.0	3141.1	3121.4
22.5°	4119.5	4175.9	4225.3	4092.7	3953.2	3785.4	3586.6	3363.9	3104.5	2904.3	2854.9
25°	4366.3	4410.0	4394.5	4208.4	4006.7	3795.3	3547.1	3244.0	2877.5	2644.8	2605.4
27.5°	4634.1	4653.9	4534.0	4263.3	4012.4	3737.5	3435.8	3031.1	2612.4	2429.1	2391.1
30°	4964.0	4904.8	4676.4	4297.2	3956.0	3609.2	3237.0	2719.6	2396.7	2236.0	2192.3
32.5°	5319.3	5210.7	4777.9	4273.2	3831.9	3394.9	2929.6	2499.6	2252.9	2056.9	2020.3
35°	5996.0	5687.3	4926.0	4201.3	3616.2	3108.7	2632.2	2330.5	2100.7	1890.6	1856.8
37.5°	6909.6	6372.5	5133.2	4101.2	3361.0	2830.9	2410.8	2150.0	1951.2	1734.1	1680.5
40°	7620.2	7064.7	5465.9	3994.1	3125.6	2567.3	2250.1	2055.5	1852.5	1621.3	1574.8
42.5°	8296.9	7697.7	5874.8	3874.2	2883.1	2384.0	2179.6	2034.4	1825.7	1590.3	1546.6
45°	8894.6	8209.5	6227.2	3754.4	2609.6	2214.8	2127.4	1993.5	1787.7	1550.8	1508.5
47.5°	9378.2	8649.3	6533.2	3624.7	2361.5	2086.6	2059.8	1918.8	1714.4	1470.5	1419.7
50°	9815.3	9021.5	6744.6	3486.5	2119.0	1982.2	1948.4	1782.0	1569.1	1353.4	1321.0
52.5°	10084.5	9273.9	6871.5	3509.1	1889.2	1865.2	1810.2	1639.6	1442.3	1257.6	1215.3
55°	10366.5	9512.2	6870.1	3382.2	1697.4	1689.0	1636.8	1505.7	1350.6	1195.5	1170.2
57.5°	10482.1	9533.3	6741.8	2785.8	1528.3	1474.7	1463.4	1394.3	1259.0	1112.4	1084.2
60°	10559.7	9440.3	6499.3	1901.9	1315.4	1277.3	1332.3	1285.8	1163.1	1009.4	981.2
62.5°	10483.5	9338.7	5863.5	1373.2	1153.2	1174.4	1226.6	1175.8	1047.5	907.9	884.0
65°	10301.7	8951.0	4629.9	1070.1	1081.3	1127.9	1168.8	1084.2	848.7	710.6	696.5
67.5°	9805.4	8213.7	2979.0	981.2	1040.5	1088.4	1102.5	917.8	768.4	635.8	620.3
70°	8760.7	6593.8	1147.6	924.9	999.6	1020.7	962.9	841.7	706.3	592.1	578.0
72.5°	6853.2	4329.6	662.6	845.9	912.2	892.4	893.8	755.7	637.2	528.7	517.4
75°	4259.1	1567.7	589.3	752.9	772.6	809.2	762.7	655.6	548.4	483.6	469.5
77.5°	1408.4	445.5	545.6	648.5	692.2	665.4	638.7	559.7	469.5	418.7	411.7
80°	341.2	334.1	489.2	507.5	542.8	497.7	494.9	465.2	396.2	366.6	359.5
82.5°	210.1	239.7	389.1	315.8	362.3	366.6	417.3	383.5	289.0	300.3	290.4
85°	129.7	184.7	204.4	152.3	153.7	205.8	249.5	231.2	173.4	163.5	162.1
87.5°	43.7	38.1	43.7	32.4	43.7	74.7	112.8	107.1	71.9	49.3	46.5
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)