

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: P510201

Luminaire Tested: **VERD-M-CA4-220-760-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510201
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-CA4-220-760-U-T4
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 5700K, 1000mA LEDS AND TYPE IV OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 31049 lumens
Efficiency: N/A
Efficacy: 139.5 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

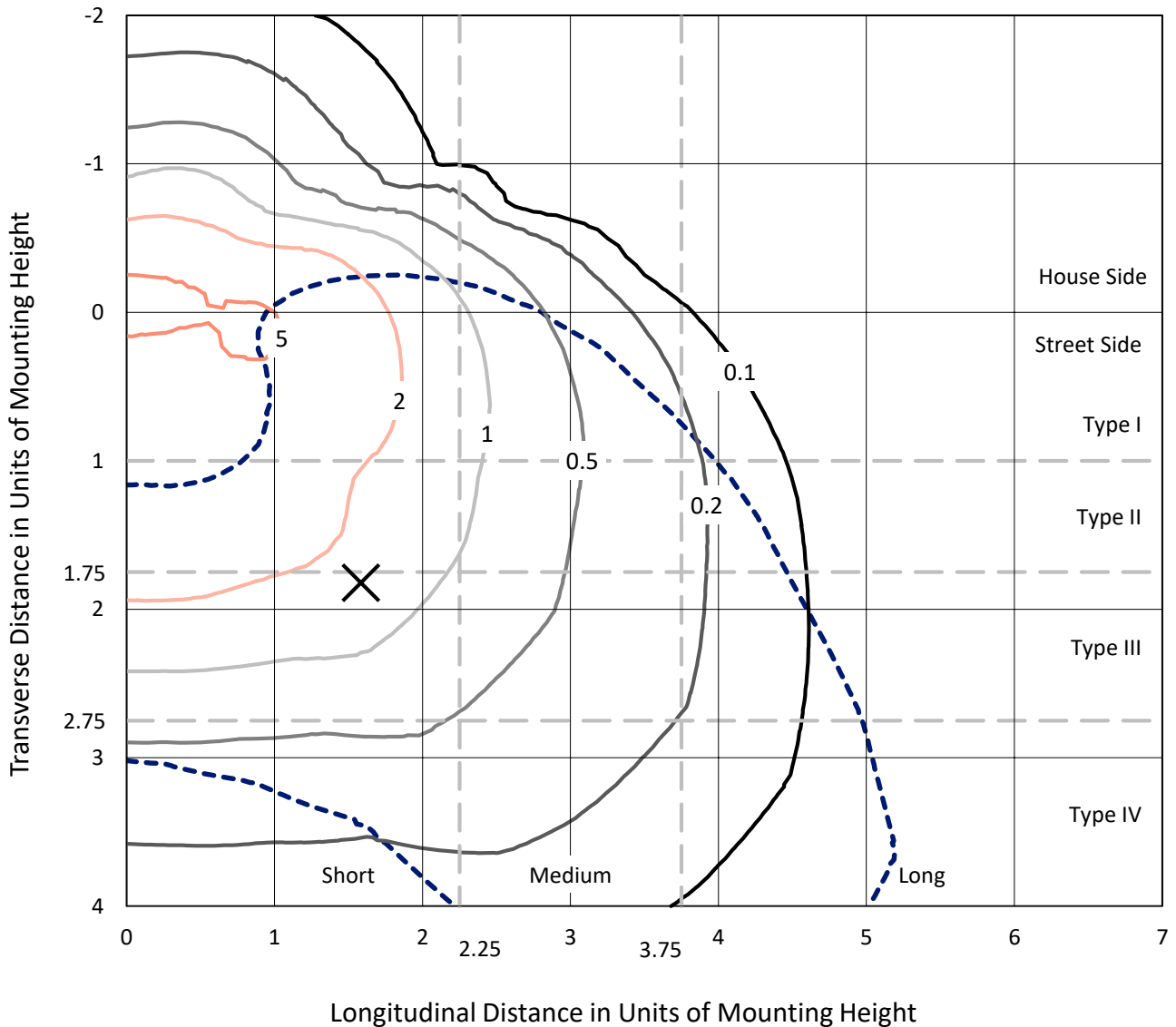
Input Watts (W): 222.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

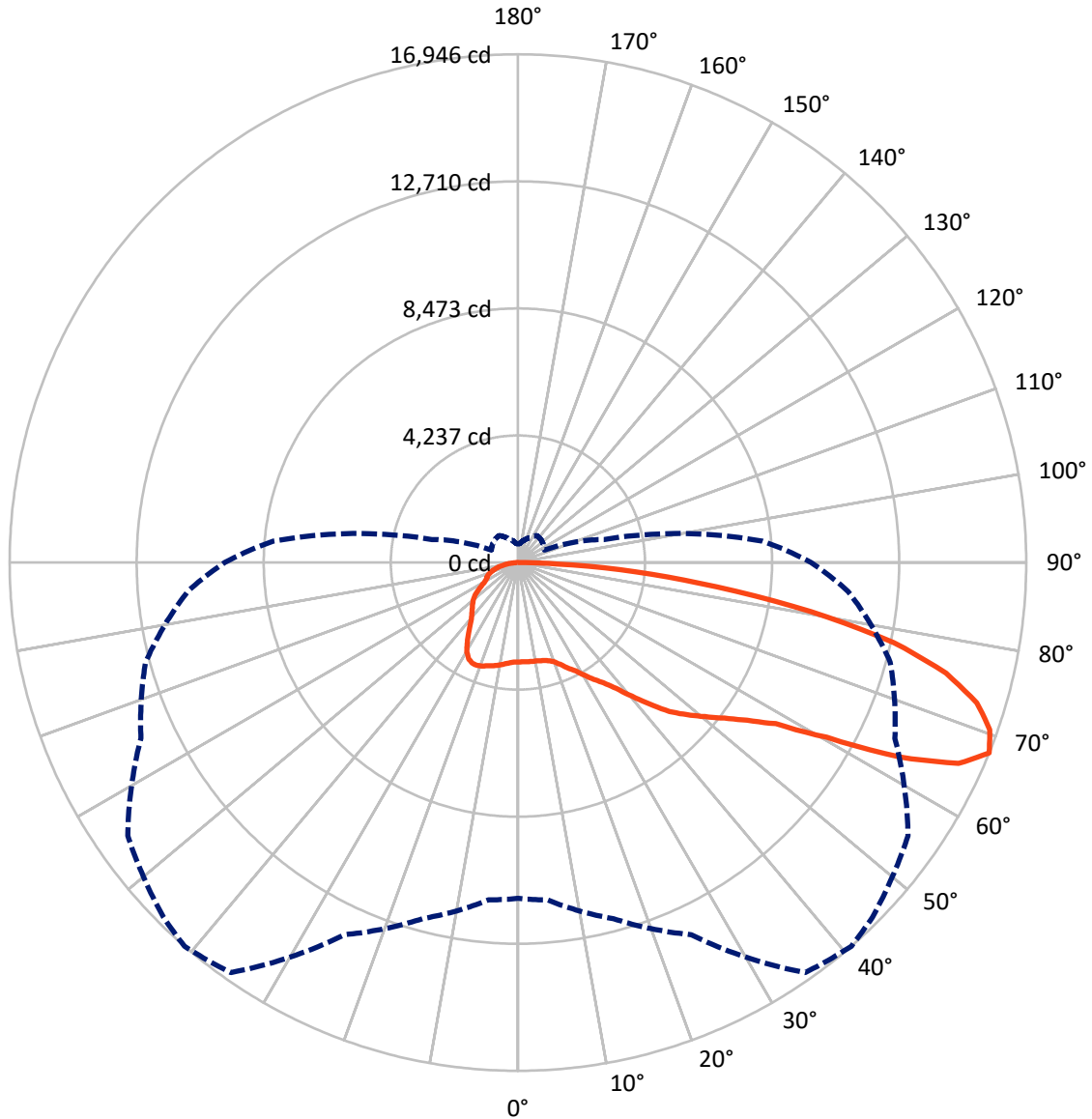
× Max cd
 - - - 1/2 Max cd



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	7026.2	0.0	7026.2
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	24022.8	0.0	24022.8
	% Fixture	77.4	0.0	77.4
Total	Lumens	31049.0	0.0	31049.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	320.3	1.0
10°-20°	993.5	3.2
20°-30°	1776.6	5.7
30°-40°	2785.8	9.0
40°-50°	4319.9	13.9
50°-60°	6090.0	19.6
60°-70°	7763.4	25.0
70°-80°	5809.6	18.7
80°-90°	1189.9	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°	31049.0	100.0
0°-180°	31049.0	100.0

Coefficient of Utilization



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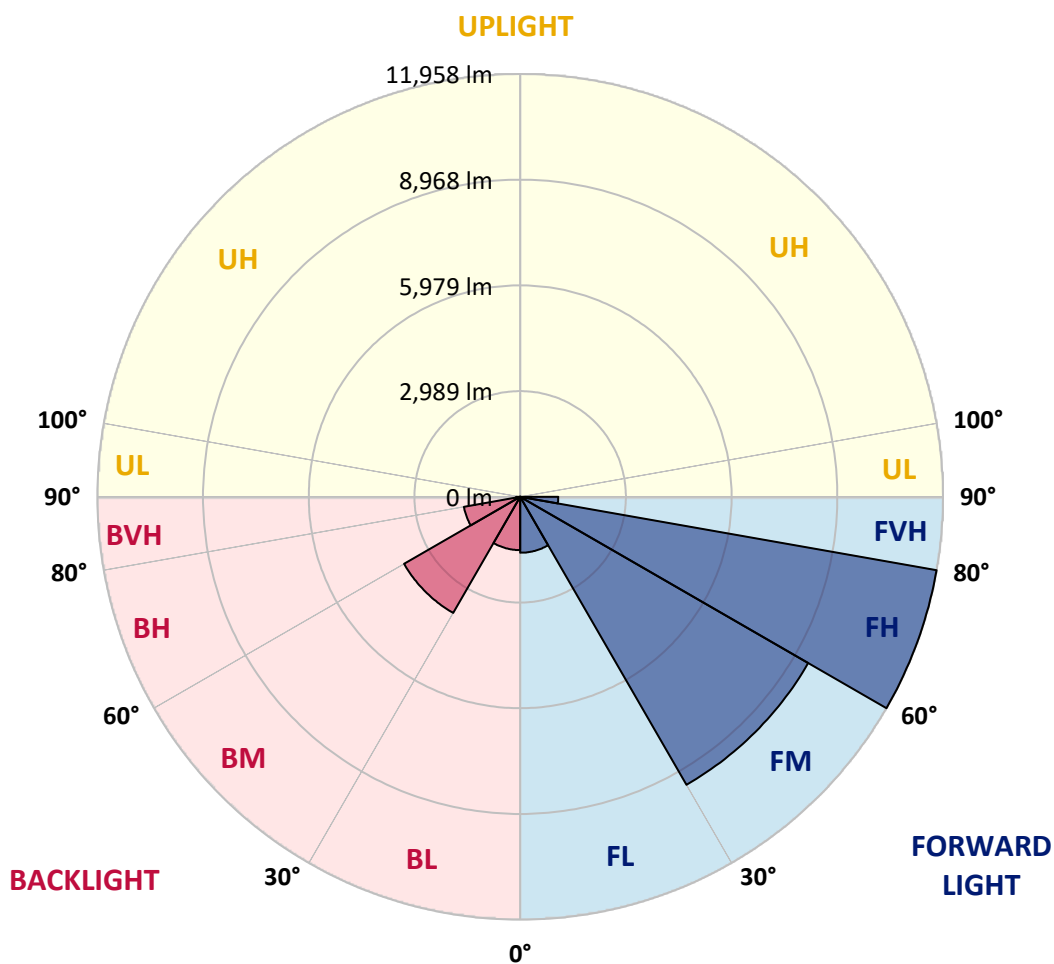
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1582.0	5.1			
FM	(30°-60°)	9404.5	30.3			
FH	(60°-80°)	11957.6	38.5			G4/12000
FVH	(80°-90°)	1078.7	3.5			G5
BL	(0°-30°)	1508.5	4.9	B3/2500		
BM	(30°-60°)	3791.3	12.2	B3/5000		
BH	(60°-80°)	1615.3	5.2	B3/2500		G3/2500
BVH	(80°-90°)	111.1	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°	3315.0	3315.0	3315.0	3315.0	3315.0	3315.0	3315.0	3315.0	3315.0	3315.0	3315.0
2.5°	3274.3	3312.2	3306.6	3299.6	3310.8	3312.2	3279.9	3292.5	3299.6	3310.8	3329.1
5°	3282.7	3320.6	3317.8	3305.2	3313.6	3317.8	3288.3	3310.8	3310.8	3315.0	3336.1
7.5°	3264.4	3301.0	3301.0	3296.7	3315.0	3331.9	3305.2	3324.9	3336.1	3347.3	3361.4
10°	3247.6	3278.5	3289.7	3286.9	3329.1	3333.3	3315.0	3362.8	3381.1	3392.3	3409.2
12.5°	3229.3	3267.2	3282.7	3298.2	3343.1	3358.6	3348.7	3397.9	3435.9	3455.5	3473.8
15°	3220.9	3263.0	3288.3	3310.8	3360.0	3388.1	3388.1	3462.6	3507.5	3532.8	3565.2
17.5°	3279.9	3323.4	3343.1	3361.4	3406.4	3444.3	3441.5	3528.6	3594.7	3634.0	3693.0
20°	3426.0	3478.0	3489.3	3496.3	3524.4	3538.5	3534.2	3628.4	3719.7	3794.2	3860.3
22.5°	3680.4	3711.3	3716.9	3688.8	3695.8	3707.1	3700.1	3752.1	3856.0	3943.2	4061.2
25°	3888.4	3937.5	3923.5	3882.7	3888.4	3903.8	3882.7	3962.8	4037.3	4151.1	4270.6
27.5°	4107.6	4144.1	4128.7	4103.4	4097.7	4086.5	4082.3	4184.9	4294.5	4384.4	4561.5
30°	4374.6	4394.3	4349.3	4338.0	4347.9	4354.9	4328.2	4458.9	4558.7	4688.0	4926.9
32.5°	4824.3	4842.5	4777.9	4605.0	4609.3	4641.6	4619.1	4783.5	4971.8	5129.2	5372.3
35°	5397.6	5397.6	5347.0	5103.9	4919.8	4921.2	4926.9	5158.7	5508.6	5861.4	6111.5
37.5°	5978.0	5997.7	5902.1	5680.1	5446.8	5323.1	5219.1	5517.1	5975.2	6762.1	7134.5
40°	6582.3	6613.2	6469.8	6266.1	5997.7	5857.1	5736.3	5917.6	6535.9	7654.5	7949.6
42.5°	7110.6	7154.2	7006.6	6791.6	6604.7	6445.9	6263.3	6336.3	7152.8	8501.8	8669.1
45°	7602.5	7626.4	7501.3	7324.2	7169.7	7082.5	6954.6	7039.0	7858.2	9330.9	9300.0
47.5°	7965.0	8000.2	7886.3	7790.8	7632.0	7580.0	7578.6	7810.5	8652.2	9991.4	9848.1
50°	8553.8	8527.1	8271.4	8154.7	8057.8	8074.6	8115.4	8515.9	9585.3	10628.0	10309.0
52.5°	9541.7	9492.6	8924.8	8681.7	8562.3	8617.1	8638.2	9155.3	10526.8	11177.5	10689.8
55°	10819.1	10661.7	10248.6	9596.5	9221.3	9273.3	9249.4	9842.5	11280.0	11701.6	10972.3
57.5°	11663.7	11811.2	11613.1	11240.7	10309.0	10139.0	10082.8	10522.6	11977.1	12203.3	11264.6
60°	12397.2	12641.7	12956.5	12717.6	12466.1	11829.5	11305.3	11295.5	12591.2	12537.8	11382.6
62.5°	13171.5	13300.8	13785.6	13933.2	14399.7	14283.1	13580.5	12273.6	13205.3	12782.3	11451.5
65°	12388.8	12561.6	13444.2	14249.4	15976.4	16145.1	15916.0	14092.0	13631.1	12907.3	11353.1
67.5°	11197.1	11292.7	12291.8	13688.7	16690.3	16946.1	16715.6	15876.7	13867.1	12852.5	11049.6
70°	9669.6	9782.0	10736.2	12641.7	16653.8	16687.5	16597.6	16041.1	13773.0	12595.4	10285.1
72.5°	7840.0	7981.9	8820.8	10799.4	15855.6	16001.7	15859.8	15715.1	13508.8	11875.9	8968.4
75°	5931.6	6119.9	6868.9	8610.0	14011.9	14748.2	14766.5	15213.4	12483.0	10181.1	6509.2
77.5°	4045.8	4225.6	4935.3	6559.8	11631.4	12807.6	13113.9	13602.9	10429.9	7523.8	3551.1
80°	2277.9	2261.1	3161.8	4686.6	8871.4	9904.3	10289.3	10269.7	7324.2	3863.1	723.7
82.5°	1052.5	1055.4	1617.5	2991.8	6006.1	6687.6	6843.6	5956.9	2570.2	654.9	230.5
85°	524.2	529.8	778.5	1500.8	3390.9	3917.9	3723.9	2478.9	550.9	191.1	137.7
87.5°	208.0	199.5	307.8	616.9	1224.0	1297.1	1132.6	496.1	99.8	67.5	46.4
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°	3315.0	3315.0	3315.0	3315.0	3315.0	3315.0	3315.0	3315.0	3315.0	3315.0	3315.0
2.5°	3324.9	3327.7	3340.3	3315.0	3322.0	3316.4	3312.2	3334.7	3333.3	3337.5	3330.5
5°	3334.7	3341.7	3354.4	3343.1	3354.4	3348.7	3353.0	3383.9	3388.1	3386.7	3386.7
7.5°	3361.4	3368.4	3392.3	3378.3	3403.5	3396.5	3397.9	3427.4	3433.1	3424.6	3421.8
10°	3417.6	3423.2	3456.9	3454.1	3464.0	3458.4	3452.7	3465.4	3462.6	3449.9	3444.3
12.5°	3482.2	3497.7	3535.6	3537.0	3549.7	3521.6	3492.1	3487.9	3479.4	3459.8	3455.5
15°	3579.2	3597.5	3655.1	3641.0	3632.6	3572.2	3523.0	3483.6	3449.9	3433.1	3417.6
17.5°	3718.3	3749.2	3829.3	3785.8	3723.9	3635.4	3549.7	3464.0	3392.3	3331.9	3308.0
20°	3895.4	3930.5	3998.0	3940.4	3846.2	3714.1	3575.0	3420.4	3264.4	3130.9	3111.3
22.5°	4106.2	4162.4	4211.6	4079.5	3940.4	3773.1	3575.0	3353.0	3094.4	2894.8	2845.7
25°	4352.1	4395.7	4380.2	4194.7	3993.8	3783.0	3535.6	3233.5	2868.1	2636.3	2596.9
27.5°	4619.1	4638.8	4519.3	4249.5	3999.4	3725.4	3424.6	3021.3	2604.0	2421.3	2383.3
30°	4947.9	4888.9	4661.3	4283.2	3943.2	3597.5	3226.5	2710.8	2388.9	2228.7	2185.2
32.5°	5302.1	5193.9	4762.4	4259.4	3819.5	3383.9	2920.1	2491.5	2245.6	2050.3	2013.7
35°	5976.6	5668.8	4910.0	4187.7	3604.5	3098.6	2623.6	2322.9	2093.8	1884.5	1850.7
37.5°	6887.2	6351.8	5116.6	4087.9	3350.1	2821.8	2403.0	2143.0	1944.9	1728.5	1675.1
40°	7595.4	7041.8	5448.2	3981.1	3115.5	2559.0	2242.8	2048.9	1846.5	1616.1	1569.7
42.5°	8270.0	7672.7	5855.7	3861.7	2873.8	2376.3	2172.5	2027.8	1819.8	1585.1	1541.6
45°	8865.8	8182.8	6207.0	3742.2	2601.1	2207.7	2120.5	1987.0	1781.9	1545.8	1503.6
47.5°	9347.8	8621.3	6512.0	3612.9	2353.8	2079.8	2053.1	1912.6	1708.8	1465.7	1415.1
50°	9783.4	8992.3	6722.8	3475.2	2112.1	1975.8	1942.1	1776.3	1564.1	1349.1	1316.7
52.5°	10051.8	9243.8	6849.3	3497.7	1883.1	1859.2	1804.4	1634.3	1437.6	1253.5	1211.3
55°	10332.9	9481.3	6847.8	3371.2	1691.9	1683.5	1631.5	1500.8	1346.2	1191.7	1166.4
57.5°	10448.1	9502.4	6720.0	2776.8	1523.3	1469.9	1458.7	1389.8	1254.9	1108.8	1080.6
60°	10525.4	9409.6	6478.3	1895.7	1311.1	1273.2	1328.0	1281.6	1159.3	1006.2	978.1
62.5°	10449.5	9308.5	5844.5	1368.7	1149.5	1170.6	1222.6	1172.0	1044.1	905.0	881.1
65°	10268.3	8922.0	4614.9	1066.6	1077.8	1124.2	1165.0	1080.6	846.0	708.3	694.2
67.5°	9773.6	8187.1	2969.3	978.1	1037.1	1084.9	1098.9	914.8	765.9	633.8	618.3
70°	8732.3	6572.4	1143.9	921.9	996.3	1017.4	959.8	838.9	704.0	590.2	576.2
72.5°	6831.0	4315.6	660.5	843.2	909.2	889.5	890.9	753.2	635.2	527.0	515.7
75°	4245.3	1562.7	587.4	750.4	770.1	806.6	760.2	653.4	546.6	482.0	468.0
77.5°	1403.9	444.1	543.8	646.4	690.0	663.3	636.6	557.9	468.0	417.4	410.3
80°	340.1	333.0	487.6	505.9	541.0	496.1	493.2	463.7	394.9	365.4	358.3
82.5°	209.4	238.9	387.9	314.8	361.2	365.4	416.0	382.2	288.1	299.3	289.5
85°	129.3	184.1	203.8	151.8	153.2	205.2	248.7	230.5	172.8	163.0	161.6
87.5°	43.6	37.9	43.6	32.3	43.6	74.5	112.4	106.8	71.7	49.2	46.4
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)