

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: P510177

Luminaire Tested: **VERD-M-CA4-220-730-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510177
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-CA4-220-730-U-T4
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 3000K, 1000mA LEDS AND TYPE IV OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 30586 lumens
Efficiency: N/A
Efficacy: 137.5 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

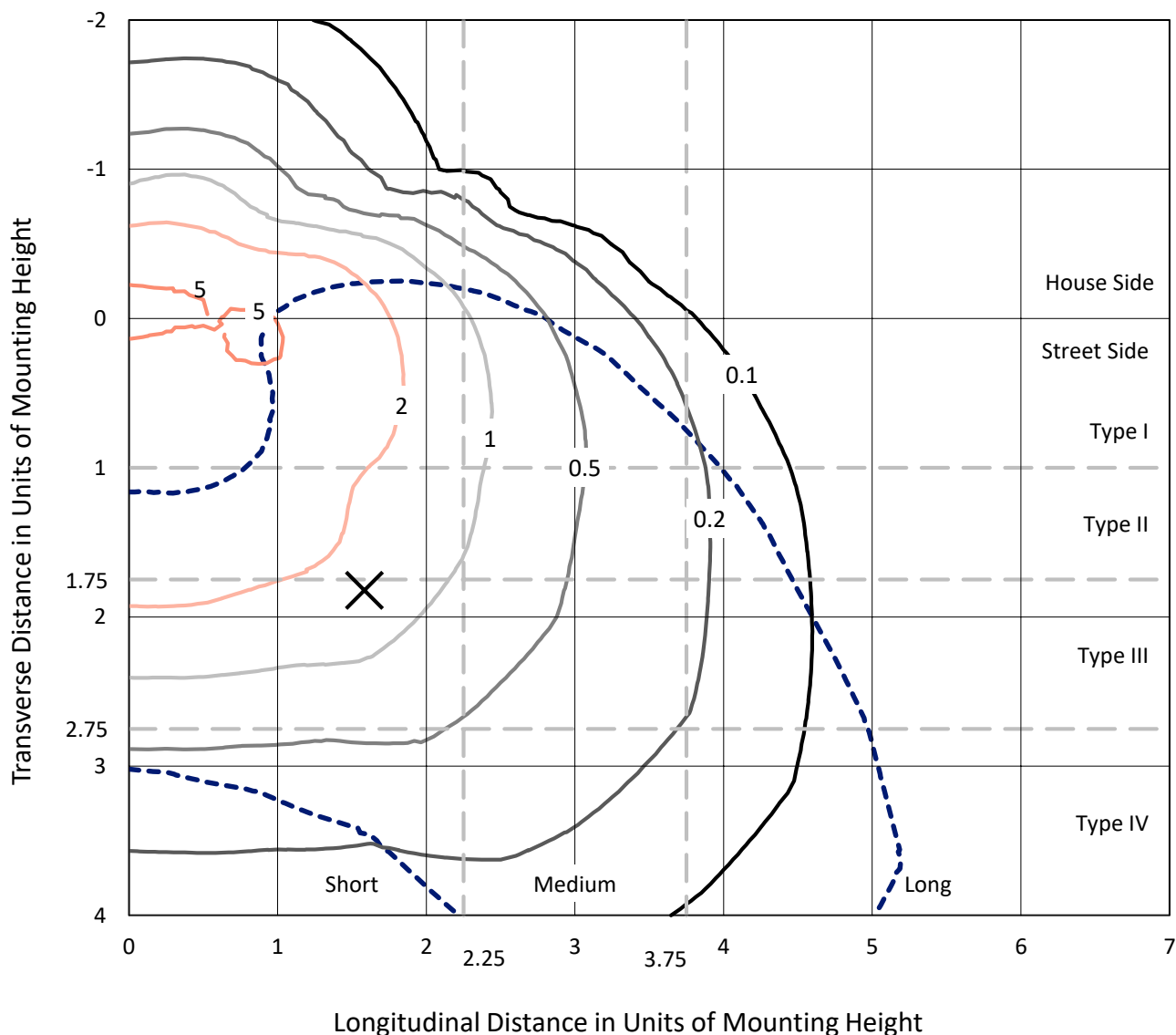
Input Watts (W): 222.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

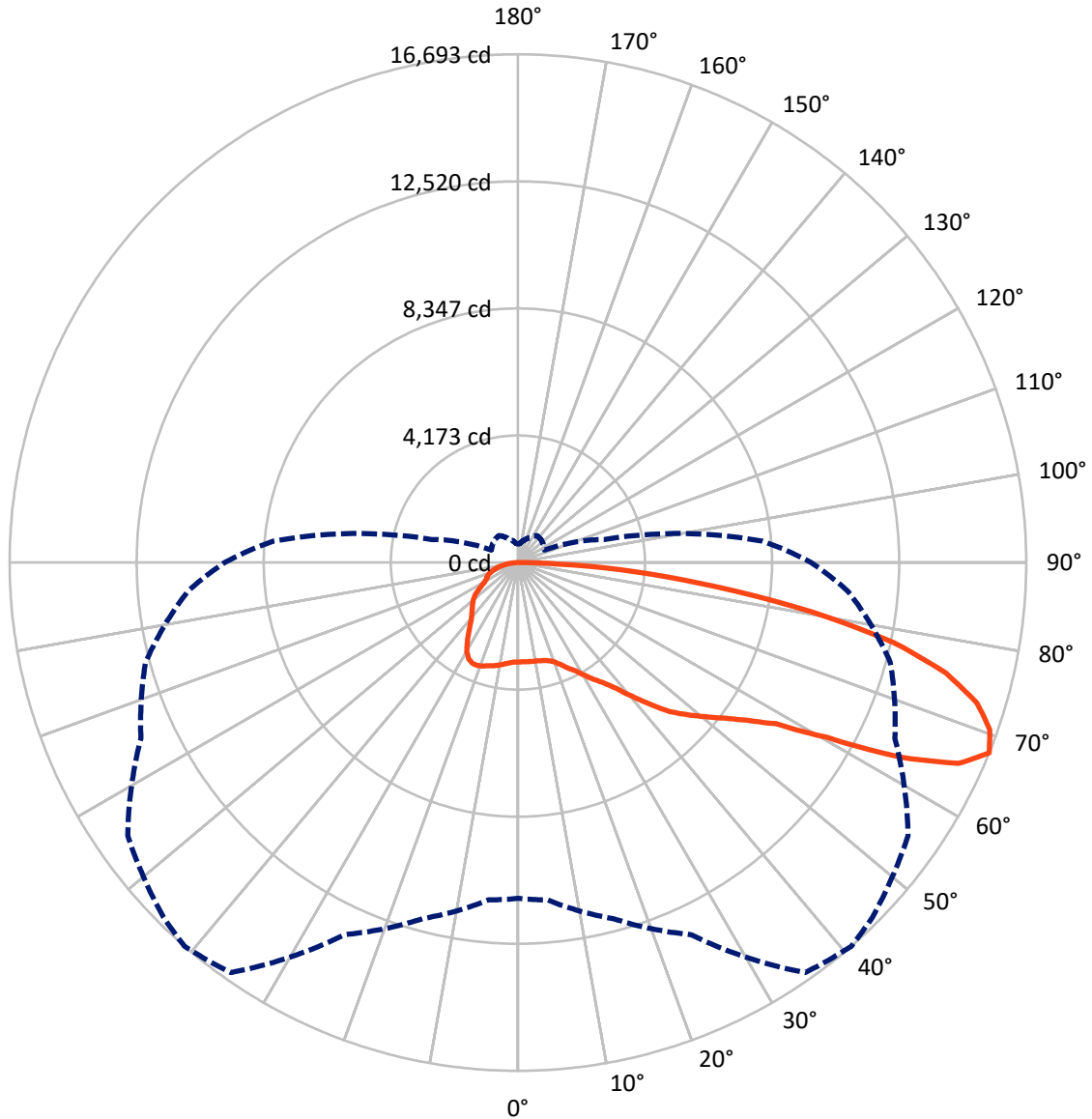
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 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	6921.5	0.0	6921.5
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	23664.5	0.0	23664.5
	% Fixture	77.4	0.0	77.4
Total	Lumens	30586.0	0.0	30586.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	315.6	1.0
10°-20°	978.7	3.2
20°-30°	1750.1	5.7
30°-40°	2744.2	9.0
40°-50°	4255.5	13.9
50°-60°	5999.2	19.6
60°-70°	7647.6	25.0
70°-80°	5722.9	18.7
80°-90°	1172.1	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°	30586.0	100.0
0°-180°	30586.0	100.0

Coefficient of Utilization



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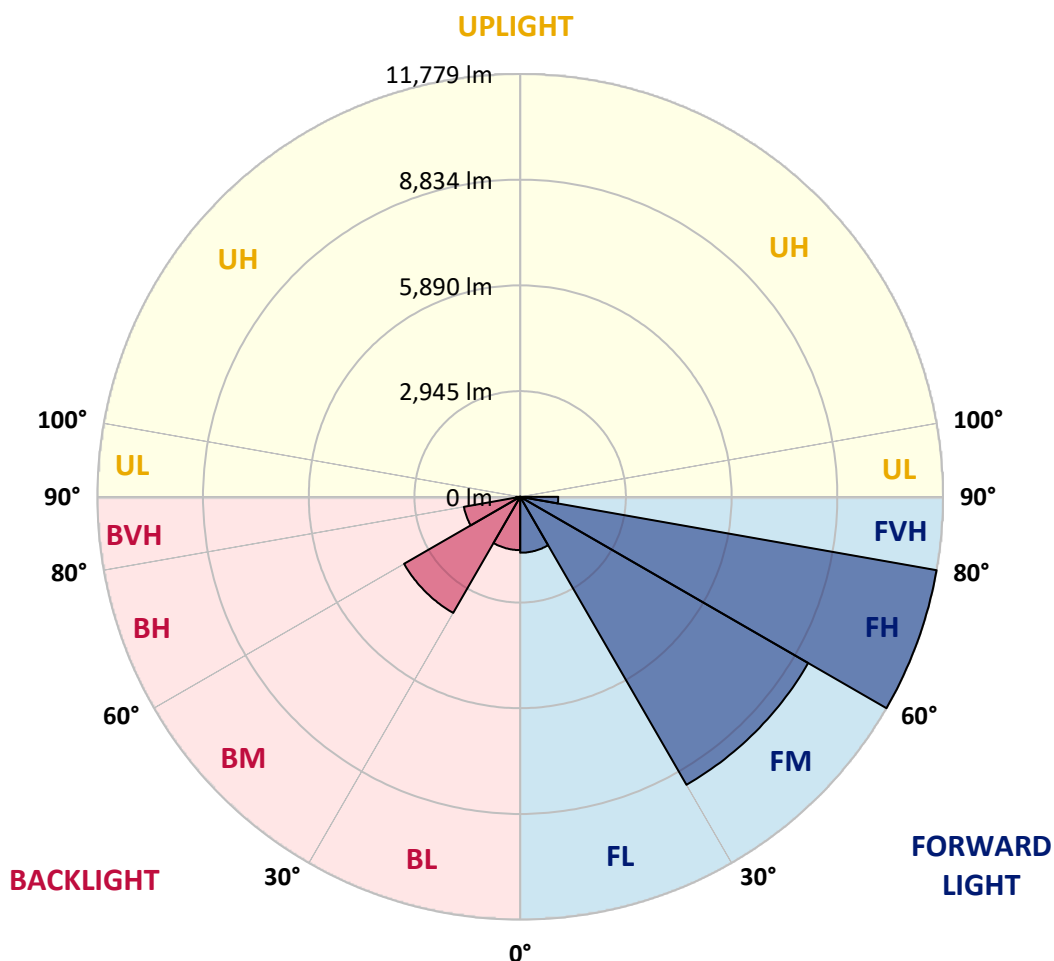
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1558.4	5.1			
FM	(30°-60°)	9264.2	30.3			
FH	(60°-80°)	11779.3	38.5			G4/12000
FVH	(80°-90°)	1062.6	3.5			G5
BL	(0°-30°)	1486.0	4.9	B3/2500		
BM	(30°-60°)	3734.7	12.2	B3/5000		
BH	(60°-80°)	1591.2	5.2	B3/2500		G3/2500
BVH	(80°-90°)	109.5	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°	3265.6	3265.6	3265.6	3265.6	3265.6	3265.6	3265.6	3265.6	3265.6	3265.6	3265.6
2.5°	3225.4	3262.8	3257.3	3250.4	3261.4	3262.8	3231.0	3243.4	3250.4	3261.4	3279.4
5°	3233.7	3271.1	3268.4	3255.9	3264.2	3268.4	3239.3	3261.4	3261.4	3265.6	3286.3
7.5°	3215.7	3251.7	3251.7	3247.6	3265.6	3282.2	3255.9	3275.3	3286.3	3297.4	3311.3
10°	3199.1	3229.6	3240.7	3237.9	3279.4	3283.6	3265.6	3312.6	3330.6	3341.7	3358.3
12.5°	3181.1	3218.5	3233.7	3249.0	3293.3	3308.5	3298.8	3347.3	3384.6	3404.0	3422.0
15°	3172.8	3214.4	3239.3	3261.4	3309.9	3337.6	3337.6	3410.9	3455.2	3480.2	3512.0
17.5°	3231.0	3273.9	3293.3	3311.3	3355.6	3392.9	3390.2	3476.0	3541.1	3579.8	3638.0
20°	3374.9	3426.2	3437.2	3444.2	3471.8	3485.7	3481.5	3574.3	3664.3	3737.6	3802.7
22.5°	3625.5	3656.0	3661.5	3633.8	3640.7	3651.8	3644.9	3696.1	3798.5	3884.4	4000.7
25°	3830.4	3878.8	3865.0	3824.8	3830.4	3845.6	3824.8	3903.7	3977.1	4089.2	4206.9
27.5°	4046.3	4082.3	4067.1	4042.2	4036.6	4025.6	4021.4	4122.5	4230.4	4319.0	4493.5
30°	4309.4	4328.7	4284.4	4273.4	4283.0	4290.0	4263.7	4392.4	4490.7	4618.1	4853.4
32.5°	4752.3	4770.3	4706.6	4536.4	4540.5	4572.4	4550.2	4712.2	4897.7	5052.7	5292.2
35°	5317.1	5317.1	5267.3	5027.8	4846.5	4847.8	4853.4	5081.8	5426.5	5773.9	6020.4
37.5°	5888.8	5908.2	5814.1	5595.4	5365.6	5243.8	5141.3	5434.8	5886.1	6661.3	7028.1
40°	6484.1	6514.6	6373.4	6172.6	5908.2	5769.8	5650.7	5829.3	6438.4	7540.3	7831.0
42.5°	7004.6	7047.5	6902.2	6690.4	6506.2	6349.8	6169.9	6241.8	7046.1	8375.1	8539.8
45°	7489.1	7512.6	7389.4	7215.0	7062.7	6976.9	6850.9	6934.0	7741.1	9191.8	9161.4
47.5°	7846.3	7880.9	7768.7	7674.6	7518.2	7467.0	7465.6	7694.0	8523.2	9842.4	9701.2
50°	8426.3	8400.0	8148.0	8033.1	7937.6	7954.2	7994.4	8388.9	9442.4	10469.5	10155.3
52.5°	9399.5	9351.0	8791.7	8552.3	8434.6	8488.6	8509.3	9018.8	10369.9	11010.8	10530.4
55°	10657.8	10502.7	10095.8	9453.4	9083.8	9135.0	9111.5	9695.7	11111.8	11527.1	10808.7
57.5°	11489.8	11635.1	11439.9	11073.1	10155.3	9987.8	9932.4	10365.7	11798.5	12021.3	11096.6
60°	12212.4	12453.2	12763.3	12528.0	12280.2	11653.1	11136.8	11127.1	12403.4	12350.8	11212.9
62.5°	12975.1	13102.5	13580.1	13725.4	14185.0	14070.1	13378.0	12090.5	13008.3	12591.7	11280.7
65°	12204.1	12374.3	13243.7	14036.9	15738.2	15904.3	15678.7	13881.8	13427.8	12714.9	11183.8
67.5°	11030.2	11124.3	12108.5	13484.5	16441.4	16693.4	16466.3	15639.9	13660.4	12660.9	10884.8
70°	9525.4	9636.2	10576.1	12453.2	16405.4	16438.7	16350.1	15801.9	13567.6	12407.6	10131.8
72.5°	7723.1	7862.9	8689.3	10638.4	15619.1	15763.1	15623.3	15480.7	13307.4	11698.8	8834.7
75°	5843.2	6028.7	6766.5	8481.7	13802.9	14528.3	14546.3	14986.5	12296.8	10029.3	6412.1
77.5°	3985.4	4162.6	4861.7	6462.0	11457.9	12616.6	12918.4	13400.1	10274.3	7411.6	3498.1
80°	2244.0	2227.4	3114.7	4616.7	8739.1	9756.6	10135.9	10116.5	7215.0	3805.5	712.9
82.5°	1036.8	1039.6	1593.3	2947.2	5916.5	6587.9	6741.6	5868.1	2531.9	645.1	227.0
85°	516.3	521.9	766.9	1478.4	3340.3	3859.5	3668.4	2441.9	542.6	188.3	135.7
87.5°	204.9	196.6	303.2	607.7	1205.7	1277.7	1115.8	488.7	98.3	66.4	45.7
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°	3265.6	3265.6	3265.6	3265.6	3265.6	3265.6	3265.6	3265.6	3265.6	3265.6	3265.6
2.5°	3275.3	3278.0	3290.5	3265.6	3272.5	3267.0	3262.8	3285.0	3283.6	3287.7	3280.8
5°	3285.0	3291.9	3304.3	3293.3	3304.3	3298.8	3303.0	3333.4	3337.6	3336.2	3336.2
7.5°	3311.3	3318.2	3341.7	3327.9	3352.8	3345.9	3347.3	3376.3	3381.9	3373.6	3370.8
10°	3366.6	3372.2	3405.4	3402.6	3412.3	3406.8	3401.2	3413.7	3410.9	3398.5	3392.9
12.5°	3430.3	3445.5	3482.9	3484.3	3496.8	3469.1	3440.0	3435.9	3427.5	3408.2	3404.0
15°	3525.8	3543.8	3600.6	3586.7	3578.4	3518.9	3470.5	3431.7	3398.5	3381.9	3366.6
17.5°	3662.9	3693.3	3772.2	3729.3	3668.4	3581.2	3496.8	3412.3	3341.7	3282.2	3258.7
20°	3837.3	3871.9	3938.4	3881.6	3788.9	3658.7	3521.7	3369.4	3215.7	3084.2	3064.9
22.5°	4044.9	4100.3	4148.8	4018.6	3881.6	3716.9	3521.7	3303.0	3048.2	2851.7	2803.2
25°	4287.2	4330.1	4314.9	4132.2	3934.2	3726.6	3482.9	3185.3	2825.4	2597.0	2558.2
27.5°	4550.2	4569.6	4451.9	4186.1	3939.7	3669.8	3373.6	2976.3	2565.1	2385.2	2347.8
30°	4874.1	4816.0	4591.7	4219.4	3884.4	3543.8	3178.4	2670.3	2353.3	2195.5	2152.6
32.5°	5223.0	5116.4	4691.4	4195.8	3762.5	3333.4	2876.6	2454.4	2212.1	2019.7	1983.7
35°	5887.5	5584.3	4836.8	4125.2	3550.8	3052.4	2584.5	2288.3	2062.6	1856.4	1823.1
37.5°	6784.5	6257.1	5040.3	4027.0	3300.2	2779.7	2367.2	2111.1	1915.9	1702.7	1650.1
40°	7482.2	6936.8	5367.0	3921.7	3069.0	2520.8	2209.4	2018.3	1819.0	1592.0	1546.3
42.5°	8146.7	7558.3	5768.4	3804.1	2830.9	2340.9	2140.1	1997.6	1792.7	1561.5	1518.6
45°	8733.6	8060.8	6114.5	3686.4	2562.4	2174.7	2088.9	1957.4	1755.3	1522.7	1481.2
47.5°	9208.4	8492.7	6414.9	3559.1	2318.7	2048.8	2022.5	1884.0	1683.3	1443.8	1394.0
50°	9637.6	8858.2	6622.5	3423.4	2080.6	1946.3	1913.1	1749.8	1540.7	1328.9	1297.1
52.5°	9902.0	9106.0	6747.1	3445.5	1855.0	1831.4	1777.5	1610.0	1416.1	1234.8	1193.3
55°	10178.8	9339.9	6745.7	3321.0	1666.7	1658.4	1607.2	1478.4	1326.2	1173.9	1149.0
57.5°	10292.3	9360.7	6619.8	2735.4	1500.6	1448.0	1436.9	1369.1	1236.2	1092.2	1064.5
60°	10368.5	9269.3	6381.7	1867.4	1291.6	1254.2	1308.2	1262.5	1142.1	991.2	963.5
62.5°	10293.7	9169.7	5757.3	1348.3	1132.4	1153.1	1204.3	1154.5	1028.5	891.5	868.0
65°	10115.1	8789.0	4546.1	1050.7	1061.8	1107.4	1147.6	1064.5	833.4	697.7	683.8
67.5°	9627.9	8065.0	2925.0	963.5	1021.6	1068.7	1082.5	901.2	754.4	624.3	609.1
70°	8602.1	6474.4	1126.8	908.1	981.5	1002.2	945.5	826.4	693.5	581.4	567.6
72.5°	6729.1	4251.2	650.6	830.6	895.6	876.3	877.7	742.0	625.7	519.1	508.0
75°	4182.0	1539.4	578.6	739.2	758.6	794.6	748.9	643.7	538.5	474.8	461.0
77.5°	1382.9	437.4	535.7	636.8	679.7	653.4	627.1	549.6	461.0	411.1	404.2
80°	335.0	328.1	480.4	498.4	533.0	488.7	485.9	456.8	389.0	359.9	353.0
82.5°	206.3	235.3	382.1	310.1	355.8	359.9	409.8	376.5	283.8	294.9	285.2
85°	127.4	181.3	200.7	149.5	150.9	202.1	245.0	227.0	170.3	160.6	159.2
87.5°	42.9	37.4	42.9	31.8	42.9	73.4	110.7	105.2	70.6	48.5	45.7
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)