

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: P510017

Luminaire Tested: **VERD-M-CA4-190-722-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510017
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-CA4-190-722-U-T4
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 2200K, 870mA LEDS AND TYPE IV OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22498 lumens
Efficiency: N/A
Efficacy: 116.5 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

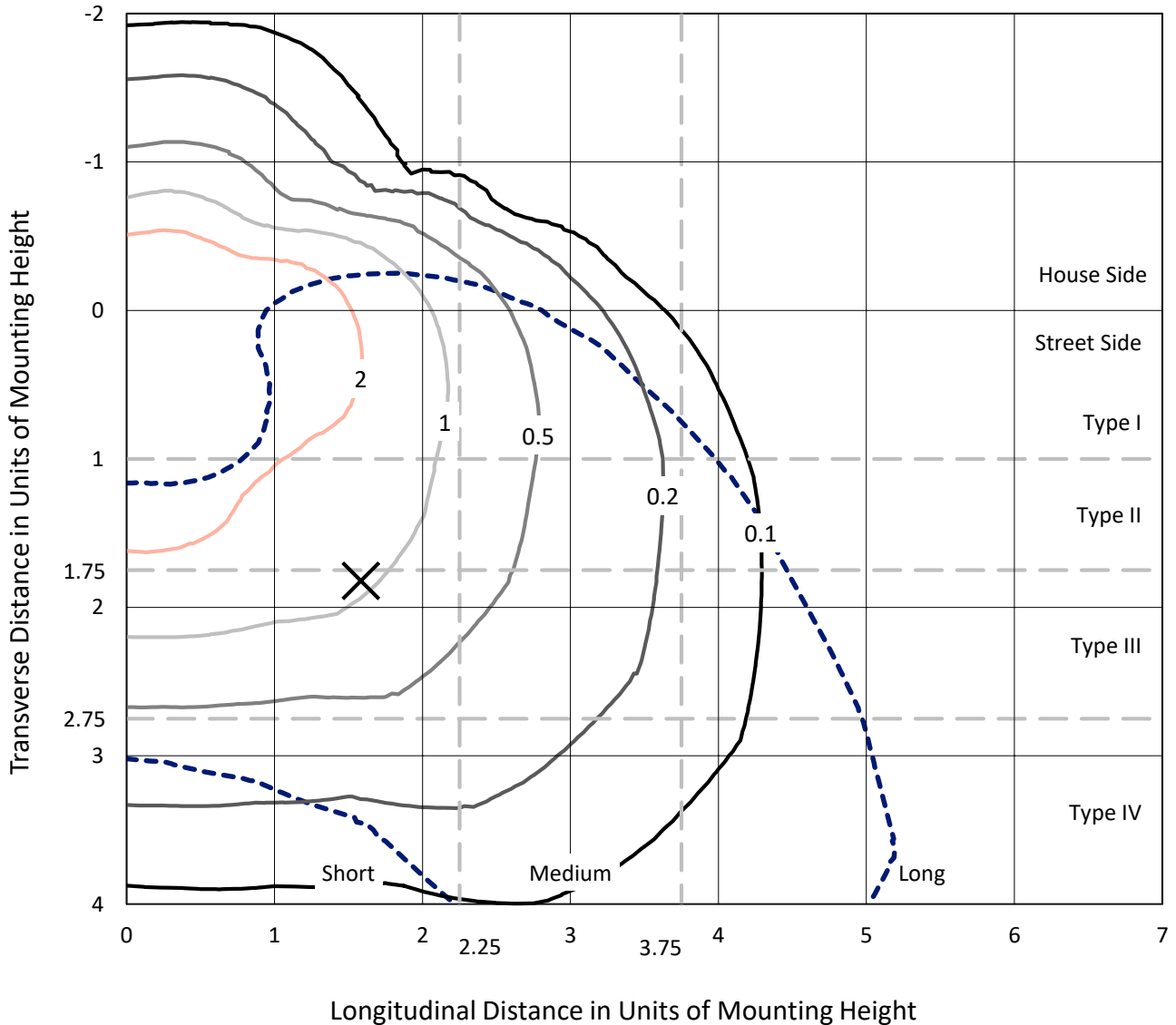
Input Watts (W): 193.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

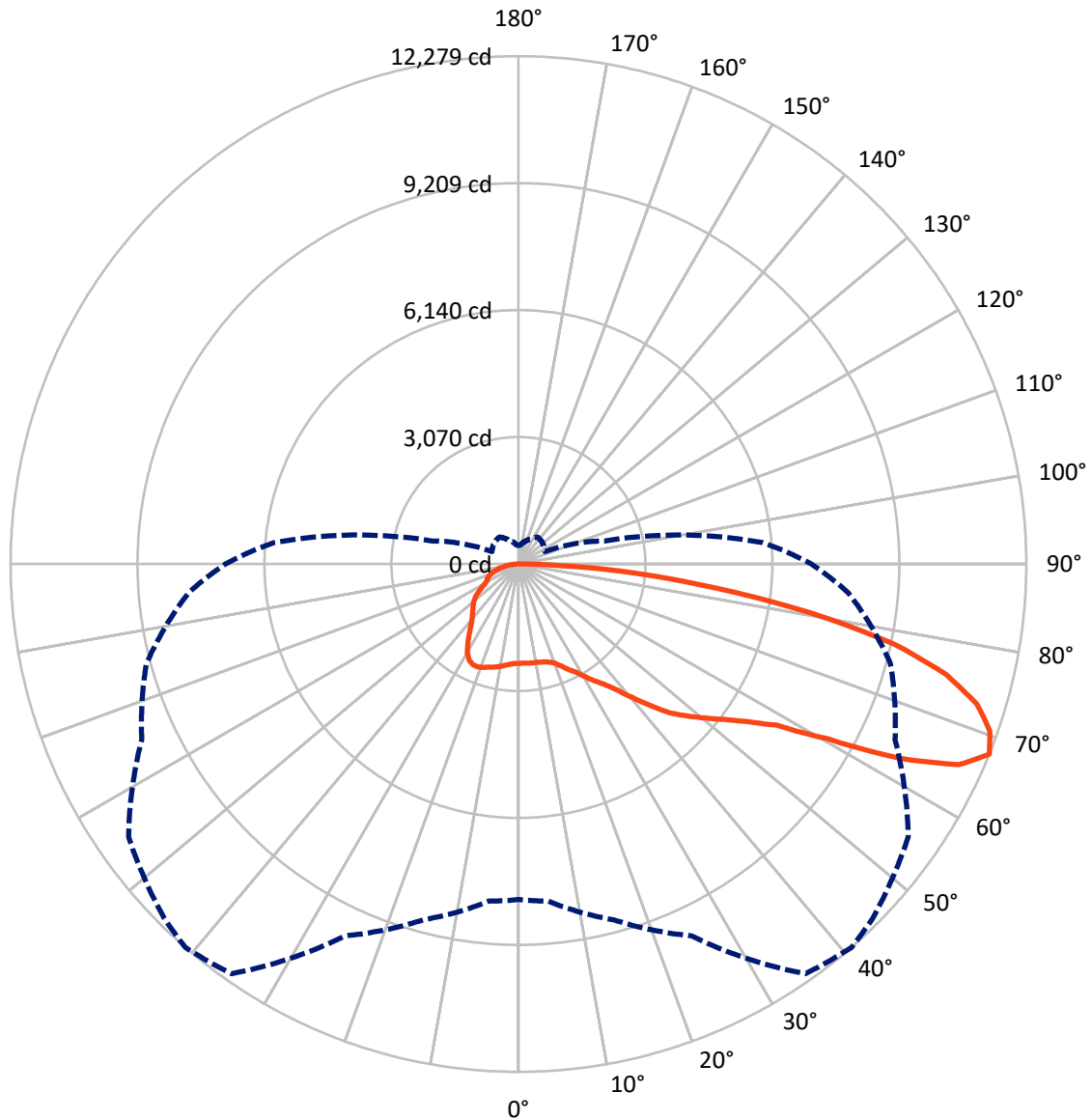
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4 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	5091.2	0.0	5091.2
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	17406.8	0.0	17406.8
	% Fixture	77.4	0.0	77.4
Total	Lumens	22498.0	0.0	22498.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	232.1	1.0
10°-20°	719.9	3.2
20°-30°	1287.3	5.7
30°-40°	2018.6	9.0
40°-50°	3130.2	13.9
50°-60°	4412.8	19.6
60°-70°	5625.3	25.0
70°-80°	4209.6	18.7
80°-90°	862.2	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°	22498.0	100.0
0°-180°	22498.0	100.0

Coefficient of Utilization



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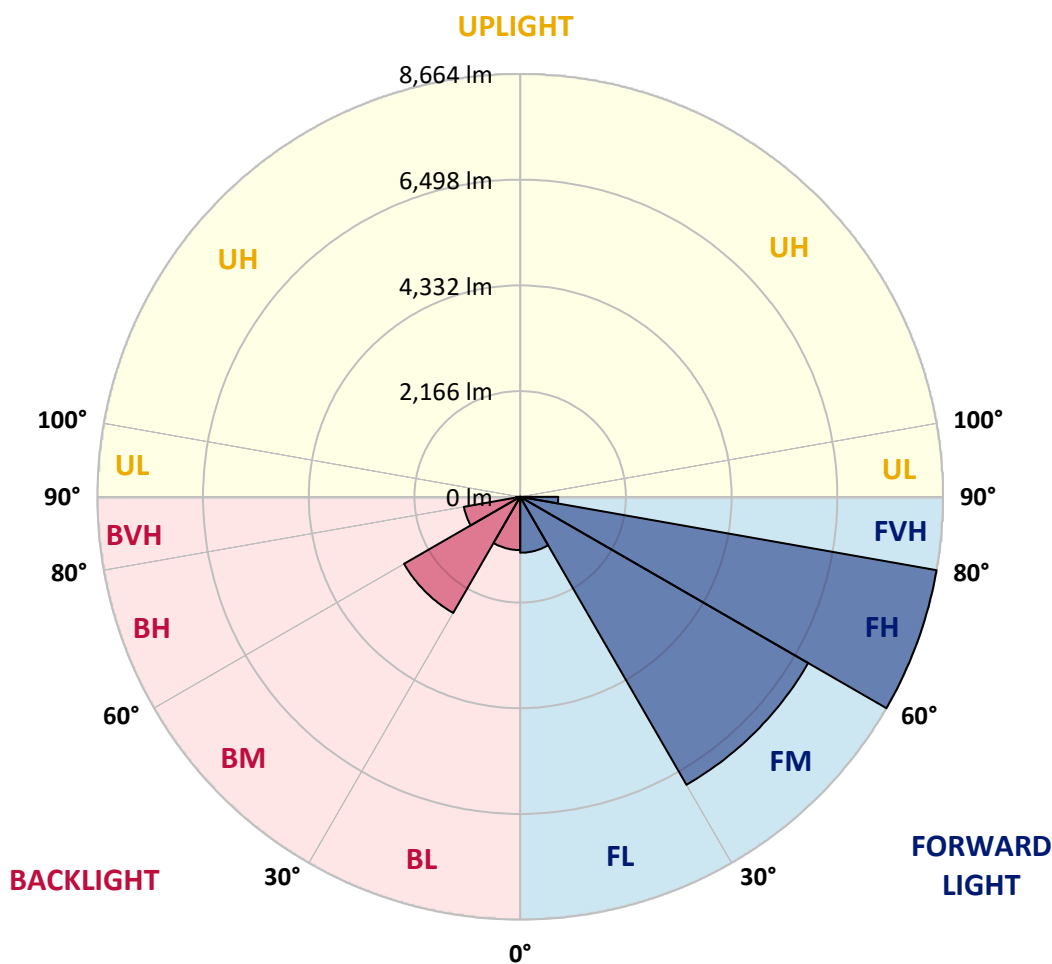
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1146.3	5.1			
FM	(30°-60°)	6814.5	30.3			
FH	(60°-80°)	8664.4	38.5			G4/12000
FVH	(80°-90°)	781.6	3.5			G5
BL	(0°-30°)	1093.1	4.9	B3/2500		
BM	(30°-60°)	2747.1	12.2	B3/5000		
BH	(60°-80°)	1170.5	5.2	B3/2500		G3/2500
BVH	(80°-90°)	80.5	0.4			G1/100
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°	2402.0	2402.0	2402.0	2402.0	2402.0	2402.0	2402.0	2402.0	2402.0	2402.0	2402.0
2.5°	2372.5	2400.0	2395.9	2390.8	2399.0	2400.0	2376.6	2385.8	2390.8	2399.0	2412.2
5°	2378.6	2406.1	2404.1	2394.9	2401.0	2404.1	2382.7	2399.0	2399.0	2402.0	2417.3
7.5°	2365.4	2391.9	2391.9	2388.8	2402.0	2414.3	2394.9	2409.2	2417.3	2425.5	2435.7
10°	2353.2	2375.6	2383.7	2381.7	2412.2	2415.3	2402.0	2436.7	2449.9	2458.1	2470.3
12.5°	2339.9	2367.4	2378.6	2389.8	2422.4	2433.6	2426.5	2462.1	2489.6	2503.9	2517.1
15°	2333.8	2364.4	2382.7	2399.0	2434.6	2455.0	2455.0	2509.0	2541.5	2559.9	2583.3
17.5°	2376.6	2408.2	2422.4	2435.7	2468.2	2495.7	2493.7	2556.8	2604.7	2633.2	2676.0
20°	2482.5	2520.2	2528.3	2533.4	2553.8	2564.0	2560.9	2629.1	2695.3	2749.3	2797.1
22.5°	2666.8	2689.2	2693.3	2672.9	2678.0	2686.1	2681.0	2718.7	2794.1	2857.2	2942.7
25°	2817.5	2853.1	2843.0	2813.4	2817.5	2828.7	2813.4	2871.5	2925.4	3007.9	3094.5
27.5°	2976.3	3002.8	2991.6	2973.3	2969.2	2961.1	2958.0	3032.3	3111.8	3176.9	3305.2
30°	3169.8	3184.1	3151.5	3143.3	3150.5	3155.6	3136.2	3230.9	3303.2	3396.9	3570.0
32.5°	3495.6	3508.9	3462.0	3336.8	3339.9	3363.3	3347.0	3466.1	3602.6	3716.6	3892.8
35°	3911.1	3911.1	3874.4	3698.3	3564.9	3565.9	3570.0	3738.0	3991.5	4247.1	4428.4
37.5°	4331.6	4345.9	4276.6	4115.8	3946.7	3857.1	3781.8	3997.6	4329.6	4899.8	5169.7
40°	4769.5	4791.9	4688.0	4540.4	4345.9	4244.1	4156.5	4287.8	4735.9	5546.4	5760.2
42.5°	5152.3	5183.9	5077.0	4921.2	4785.8	4670.7	4538.3	4591.3	5182.9	6160.4	6281.6
45°	5508.7	5526.0	5435.4	5307.1	5195.1	5132.0	5039.3	5100.4	5694.0	6761.2	6738.8
47.5°	5771.4	5796.9	5714.4	5645.2	5530.1	5492.4	5491.4	5659.4	6269.4	7239.8	7135.9
50°	6198.1	6178.7	5993.4	5908.9	5838.6	5850.9	5880.4	6170.6	6945.5	7701.0	7469.9
52.5°	6913.9	6878.3	6466.9	6290.7	6204.2	6243.9	6259.2	6633.9	7627.7	8099.2	7745.8
55°	7839.5	7725.5	7426.1	6953.6	6681.7	6719.4	6702.1	7131.8	8173.5	8479.0	7950.5
57.5°	8451.5	8558.4	8414.8	8145.0	7469.9	7346.7	7305.9	7624.6	8678.5	8842.5	8162.3
60°	8983.0	9160.2	9388.3	9215.2	9032.9	8571.6	8191.8	8184.7	9123.5	9084.8	8247.8
62.5°	9544.0	9637.7	9989.0	10095.9	10434.0	10349.5	9840.4	8893.4	9568.5	9262.0	8297.7
65°	8976.9	9102.1	9741.6	10325.0	11576.5	11698.7	11532.7	10211.0	9877.0	9352.6	8226.4
67.5°	8113.4	8182.6	8906.6	9918.8	12093.7	12279.1	12112.1	11504.2	10048.1	9312.9	8006.5
70°	7006.6	7088.0	7779.4	9160.2	12067.3	12091.7	12026.5	11623.3	9979.9	9126.6	7452.6
72.5°	5680.8	5783.7	6391.5	7825.2	11488.9	11594.8	11492.0	11387.1	9788.4	8605.2	6498.5
75°	4298.0	4434.5	4977.2	6238.8	10153.0	10686.5	10699.8	11023.6	9045.1	7377.2	4716.5
77.5°	2931.5	3061.9	3576.1	4753.2	8428.0	9280.3	9502.3	9856.7	7557.4	5451.7	2573.1
80°	1650.6	1638.4	2291.1	3395.9	6428.2	7176.6	7455.6	7441.4	5307.1	2799.2	524.4
82.5°	762.7	764.7	1172.0	2167.9	4352.0	4845.8	4958.9	4316.4	1862.4	474.5	167.0
85°	379.8	383.9	564.1	1087.5	2457.0	2838.9	2698.4	1796.2	399.2	138.5	99.8
87.5°	150.7	144.6	223.0	447.0	886.9	939.8	820.7	359.4	72.3	48.9	33.6
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°	2402.0	2402.0	2402.0	2402.0	2402.0	2402.0	2402.0	2402.0	2402.0	2402.0	2402.0
2.5°	2409.2	2411.2	2420.4	2402.0	2407.1	2403.1	2400.0	2416.3	2415.3	2418.3	2413.3
5°	2416.3	2421.4	2430.6	2422.4	2430.6	2426.5	2429.5	2451.9	2455.0	2454.0	2454.0
7.5°	2435.7	2440.7	2458.1	2447.9	2466.2	2461.1	2462.1	2483.5	2487.6	2481.5	2479.4
10°	2476.4	2480.5	2504.9	2502.9	2510.0	2505.9	2501.8	2511.0	2509.0	2499.8	2495.7
12.5°	2523.2	2534.4	2561.9	2562.9	2572.1	2551.7	2530.3	2527.3	2521.2	2506.9	2503.9
15°	2593.5	2606.7	2648.5	2638.3	2632.2	2588.4	2552.8	2524.2	2499.8	2487.6	2476.4
17.5°	2694.3	2716.7	2774.7	2743.2	2698.4	2634.2	2572.1	2510.0	2458.1	2414.3	2397.0
20°	2822.6	2848.0	2896.9	2855.2	2786.9	2691.2	2590.4	2478.4	2365.4	2268.7	2254.4
22.5°	2975.3	3016.1	3051.7	2956.0	2855.2	2734.0	2590.4	2429.5	2242.2	2097.6	2062.0
25°	3153.5	3185.1	3173.9	3039.5	2893.9	2741.1	2561.9	2343.0	2078.2	1910.2	1881.7
27.5°	3347.0	3361.2	3274.7	3079.2	2897.9	2699.4	2481.5	2189.2	1886.8	1754.4	1727.0
30°	3585.3	3542.5	3377.5	3103.6	2857.2	2606.7	2337.9	1964.2	1731.0	1614.9	1583.4
32.5°	3841.9	3763.4	3450.8	3086.3	2767.6	2451.9	2115.9	1805.4	1627.2	1485.6	1459.2
35°	4330.6	4107.6	3557.8	3034.4	2611.8	2245.2	1901.1	1683.2	1517.2	1365.5	1341.0
37.5°	4990.4	4602.5	3707.4	2962.1	2427.5	2044.6	1741.2	1552.8	1409.3	1252.4	1213.8
40°	5503.6	5102.4	3947.8	2884.7	2257.5	1854.2	1625.1	1484.6	1338.0	1171.0	1137.4
42.5°	5992.4	5559.6	4243.0	2798.1	2082.3	1721.9	1574.2	1469.3	1318.6	1148.6	1117.0
45°	6424.1	5929.3	4497.6	2711.6	1884.8	1599.7	1536.5	1439.8	1291.1	1120.1	1089.5
47.5°	6773.4	6247.0	4718.6	2617.9	1705.6	1507.0	1487.7	1385.8	1238.2	1062.0	1025.4
50°	7089.0	6515.8	4871.3	2518.1	1530.4	1431.7	1407.2	1287.1	1133.3	977.5	954.1
52.5°	7283.5	6698.0	4962.9	2534.4	1364.5	1347.1	1307.4	1184.2	1041.7	908.3	877.7
55°	7487.2	6870.1	4961.9	2442.8	1226.0	1219.9	1182.2	1087.5	975.5	863.5	845.1
57.5°	7570.7	6885.4	4869.3	2012.1	1103.8	1065.1	1056.9	1007.0	909.3	803.4	783.0
60°	7626.7	6818.2	4694.1	1373.6	950.0	922.5	962.2	928.6	840.1	729.1	708.7
62.5°	7571.7	6744.9	4234.9	991.8	832.9	848.2	885.9	849.2	756.6	655.8	638.4
65°	7440.3	6464.9	3343.9	772.9	781.0	814.6	844.1	783.0	613.0	513.2	503.0
67.5°	7081.9	5932.3	2151.6	708.7	751.5	786.1	796.3	662.9	554.9	459.2	448.0
70°	6327.4	4762.4	828.9	668.0	721.9	737.2	695.5	607.9	510.1	427.7	417.5
72.5°	4949.7	3127.0	478.6	610.9	658.8	644.6	645.6	545.8	460.2	381.8	373.7
75°	3076.1	1132.3	425.6	543.7	558.0	584.5	550.9	473.5	396.1	349.3	339.1
77.5°	1017.2	321.8	394.1	468.4	500.0	480.6	461.3	404.2	339.1	302.4	297.3
80°	246.4	241.3	353.3	366.6	392.0	359.4	357.4	336.0	286.1	264.7	259.7
82.5°	151.7	173.1	281.0	228.1	261.7	264.7	301.4	277.0	208.7	216.9	209.8
85°	93.7	133.4	147.6	110.0	111.0	148.7	180.2	167.0	125.2	118.1	117.1
87.5°	31.6	27.5	31.6	23.4	31.6	54.0	81.5	77.4	51.9	35.6	33.6
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)