

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: P509889

Luminaire Tested: **VERD-M-CA3-160-730-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P509889
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-CA3-160-730-U-T4
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 3000K, 1000mA LEDS AND TYPE IV OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22861 lumens
Efficiency: N/A
Efficacy: 140.5 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

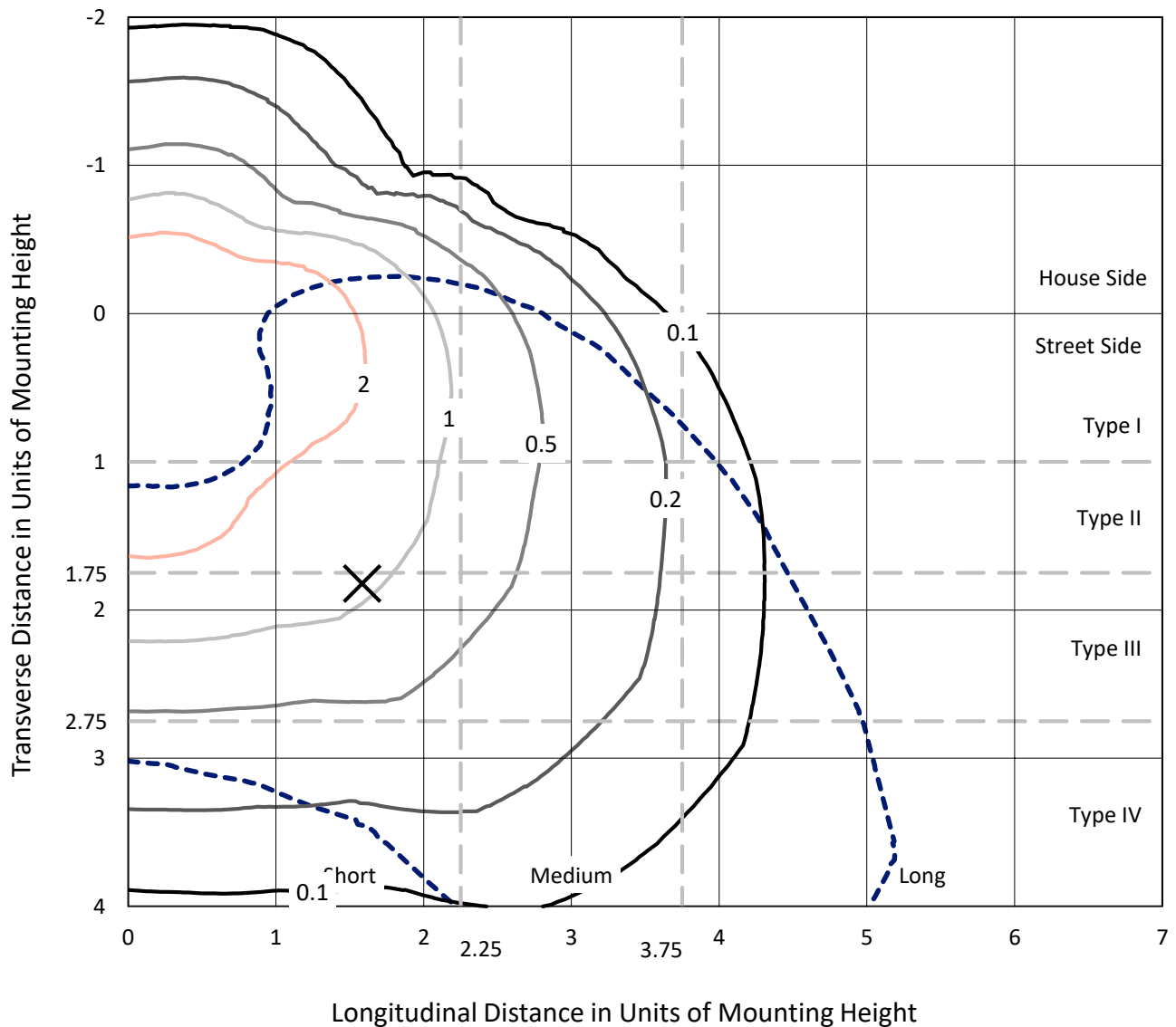
Input Watts (W): 162.7
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

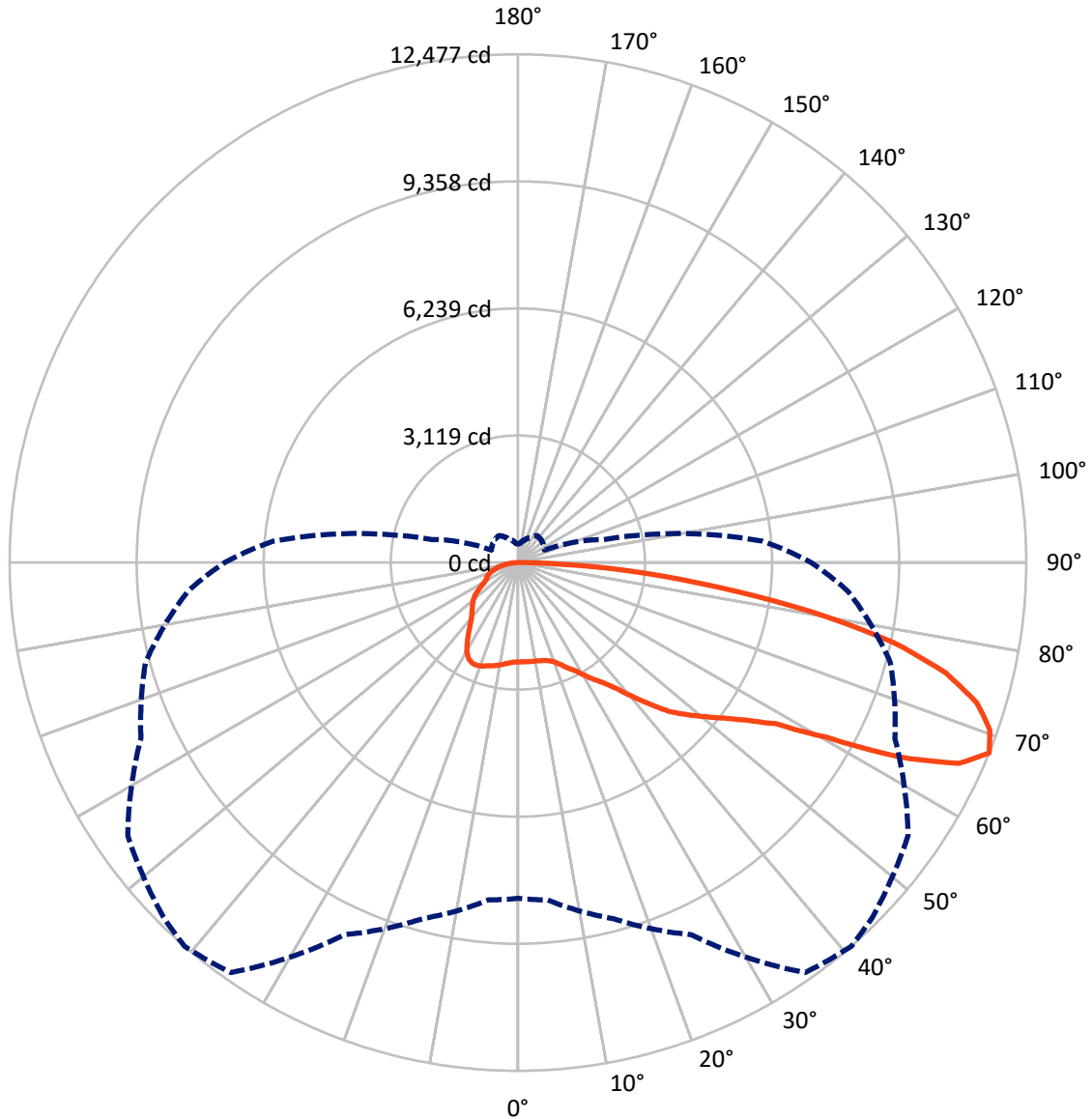
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.1 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	5173.3	0.0	5173.3
	% Fixture	22.6	0.0	22.6
Street Side	Lumens	17687.7	0.0	17687.7
	% Fixture	77.4	0.0	77.4
Total	Lumens	22861.0	0.0	22861.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	235.9	1.0
10°-20°	731.5	3.2
20°-30°	1308.1	5.7
30°-40°	2051.1	9.0
40°-50°	3180.7	13.9
50°-60°	4484.0	19.6
60°-70°	5716.1	25.0
70°-80°	4277.5	18.7
80°-90°	876.1	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°	22861.0	100.0
0°-180°	22861.0	100.0

Coefficient of Utilization



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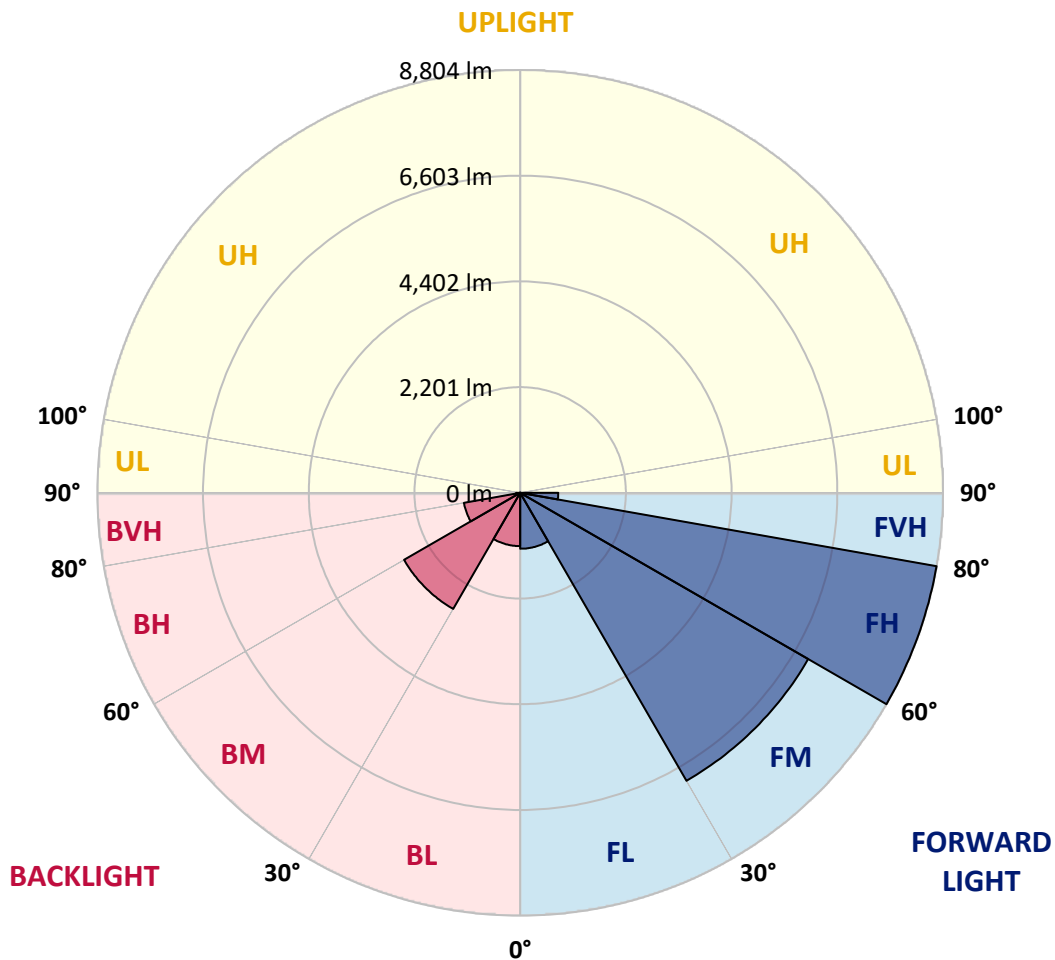
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1164.8	5.1			
FM (30°-60°)	6924.4	30.3			
FH (60°-80°)	8804.2	38.5			G4/12000
FVH (80°-90°)	794.2	3.5			G5
BL (0°-30°)	1110.7	4.9	B3/2500		
BM (30°-60°)	2791.5	12.2	B3/5000		
BH (60°-80°)	1189.3	5.2	B3/2500		G3/2500
BVH (80°-90°)	81.8	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°	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8
2.5°	2410.8	2438.7	2434.6	2429.4	2437.7	2438.7	2414.9	2424.3	2429.4	2437.7	2451.2
5°	2417.0	2444.9	2442.9	2433.6	2439.8	2442.9	2421.1	2437.7	2437.7	2440.8	2456.3
7.5°	2403.6	2430.5	2430.5	2427.4	2440.8	2453.2	2433.6	2448.0	2456.3	2464.6	2475.0
10°	2391.1	2413.9	2422.2	2420.1	2451.2	2454.3	2440.8	2476.0	2489.4	2497.7	2510.1
12.5°	2377.7	2405.6	2417.0	2428.4	2461.5	2472.9	2465.6	2501.9	2529.8	2544.3	2557.7
15°	2371.5	2402.5	2421.1	2437.7	2473.9	2494.6	2494.6	2549.4	2582.6	2601.2	2625.0
17.5°	2414.9	2447.0	2461.5	2475.0	2508.1	2536.0	2533.9	2598.1	2646.7	2675.7	2719.1
20°	2522.5	2560.8	2569.1	2574.3	2595.0	2605.3	2602.2	2671.5	2738.8	2793.6	2842.3
22.5°	2709.8	2732.6	2736.7	2716.0	2721.2	2729.5	2724.3	2762.6	2839.2	2903.3	2990.2
25°	2863.0	2899.2	2888.8	2858.8	2863.0	2874.3	2858.8	2917.8	2972.6	3056.4	3144.4
27.5°	3024.4	3051.3	3039.9	3021.3	3017.1	3008.8	3005.7	3081.3	3162.0	3228.2	3358.6
30°	3221.0	3235.4	3202.3	3194.1	3201.3	3206.5	3186.8	3283.0	3356.5	3451.7	3627.6
32.5°	3552.1	3565.5	3517.9	3390.6	3393.7	3417.5	3401.0	3522.0	3660.7	3776.6	3955.6
35°	3974.2	3974.2	3937.0	3758.0	3622.4	3623.4	3627.6	3798.3	4055.9	4315.6	4499.8
37.5°	4401.5	4416.0	4345.6	4182.2	4010.4	3919.4	3842.8	4062.1	4399.5	4978.9	5253.1
40°	4846.4	4869.2	4763.7	4613.6	4416.0	4312.5	4223.6	4357.0	4812.3	5635.9	5853.2
42.5°	5235.5	5267.5	5158.9	5000.6	4863.0	4746.1	4611.6	4665.4	5266.5	6259.8	6382.9
45°	5597.6	5615.2	5523.1	5392.7	5278.9	5214.8	5120.6	5182.7	5785.9	6870.3	6847.5
47.5°	5864.6	5890.4	5806.6	5736.3	5619.3	5581.1	5580.0	5750.7	6370.5	7356.6	7251.0
50°	6298.1	6278.4	6090.1	6004.2	5932.8	5945.3	5975.3	6270.1	7057.5	7825.3	7590.4
52.5°	7025.5	6989.3	6571.2	6392.2	6304.3	6344.6	6360.2	6740.9	7750.8	8229.8	7870.8
55°	7966.0	7850.1	7545.9	7065.8	6789.6	6827.8	6810.3	7246.9	8305.4	8615.8	8078.8
57.5°	8587.8	8696.5	8550.6	8276.4	7590.4	7465.2	7423.8	7747.7	8818.6	8985.1	8294.0
60°	9127.9	9308.0	9539.7	9363.8	9178.6	8709.9	8324.0	8316.7	9270.7	9231.4	8380.9
62.5°	9698.0	9793.2	10150.2	10258.8	10602.3	10516.5	9999.1	9036.9	9722.9	9411.4	8431.6
65°	9121.7	9249.0	9898.8	10491.6	11763.3	11887.4	11718.8	10375.8	10036.4	9503.5	8359.2
67.5°	8244.3	8314.7	9050.3	10078.8	12288.9	12477.2	12307.5	11689.8	10210.2	9463.2	8135.7
70°	7119.6	7202.4	7904.9	9308.0	12262.0	12286.8	12220.6	11810.9	10140.9	9273.8	7572.8
72.5°	5772.5	5877.0	6494.7	7951.5	11674.3	11781.9	11677.4	11570.8	9946.4	8744.1	6603.3
75°	4367.4	4506.0	5057.5	6339.5	10316.8	10858.9	10872.4	11201.4	9191.0	7496.2	4792.6
77.5°	2978.8	3111.3	3633.8	4829.9	8564.0	9430.1	9655.6	10015.7	7679.4	5539.7	2614.6
80°	1677.2	1664.8	2328.0	3450.7	6531.9	7292.4	7575.9	7561.4	5392.7	2844.3	532.9
82.5°	775.0	777.0	1190.9	2202.8	4422.2	4924.0	5038.9	4386.0	1892.4	482.2	169.7
85°	385.9	390.1	573.2	1105.0	2496.7	2884.7	2741.9	1825.2	405.6	140.7	101.4
87.5°	153.1	146.9	226.6	454.2	901.2	955.0	834.0	365.2	73.5	49.7	34.1
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°	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8	2440.8
2.5°	2448.0	2450.1	2459.4	2440.8	2446.0	2441.8	2438.7	2455.3	2454.3	2457.4	2452.2
5°	2455.3	2460.5	2469.8	2461.5	2469.8	2465.6	2468.7	2491.5	2494.6	2493.6	2493.6
7.5°	2475.0	2480.1	2497.7	2487.4	2506.0	2500.8	2501.9	2523.6	2527.7	2521.5	2519.4
10°	2516.3	2520.5	2545.3	2543.2	2550.5	2546.3	2542.2	2551.5	2549.4	2540.1	2536.0
12.5°	2563.9	2575.3	2603.3	2604.3	2613.6	2592.9	2571.2	2568.1	2561.9	2547.4	2544.3
15°	2635.3	2648.8	2691.2	2680.9	2674.6	2630.2	2593.9	2565.0	2540.1	2527.7	2516.3
17.5°	2737.8	2760.5	2819.5	2787.4	2741.9	2676.7	2613.6	2550.5	2497.7	2453.2	2435.6
20°	2868.1	2894.0	2943.7	2901.2	2831.9	2734.7	2632.2	2518.4	2403.6	2305.3	2290.8
22.5°	3023.3	3064.7	3100.9	3003.7	2901.2	2778.1	2632.2	2468.7	2278.4	2131.4	2095.2
25°	3204.4	3236.5	3225.1	3088.5	2940.6	2785.4	2603.3	2380.8	2111.8	1941.1	1912.1
27.5°	3401.0	3415.5	3327.5	3128.9	2944.7	2742.9	2521.5	2224.6	1917.3	1782.8	1754.8
30°	3643.1	3599.6	3432.0	3153.7	2903.3	2648.8	2375.6	1995.9	1759.0	1641.0	1608.9
32.5°	3903.8	3824.2	3506.5	3136.1	2812.3	2491.5	2150.1	1834.5	1653.4	1509.6	1482.7
35°	4400.5	4173.9	3615.2	3083.3	2653.9	2281.5	1931.7	1710.3	1541.7	1387.5	1362.7
37.5°	5071.0	4676.7	3767.3	3009.9	2466.7	2077.6	1769.3	1577.9	1432.0	1272.7	1233.3
40°	5592.4	5184.8	4011.4	2931.2	2293.9	1884.1	1651.3	1508.6	1359.6	1189.9	1155.7
42.5°	6089.1	5649.3	4311.5	2843.3	2115.9	1749.6	1599.6	1493.0	1339.9	1167.1	1135.0
45°	6527.8	6024.9	4570.2	2755.3	1915.2	1625.5	1561.3	1463.0	1312.0	1138.1	1107.1
47.5°	6882.7	6347.8	4794.7	2660.2	1733.1	1531.3	1511.7	1408.2	1258.2	1079.2	1041.9
50°	7203.4	6620.9	4949.9	2558.8	1555.1	1454.8	1429.9	1307.8	1151.6	993.3	969.5
52.5°	7401.1	6806.1	5043.0	2575.3	1386.5	1368.9	1328.5	1203.3	1058.5	922.9	891.9
55°	7608.0	6981.0	5042.0	2482.2	1245.8	1239.5	1201.3	1105.0	991.2	877.4	858.8
57.5°	7692.8	6996.5	4947.8	2044.5	1121.6	1082.3	1074.0	1023.3	924.0	816.4	795.7
60°	7749.7	6928.2	4769.9	1395.8	965.4	937.4	977.8	943.6	853.6	740.8	720.1
62.5°	7693.9	6853.7	4303.2	1007.8	846.4	861.9	900.2	862.9	768.8	666.3	648.7
65°	7560.4	6569.2	3397.9	785.3	793.6	827.7	857.7	795.7	622.9	521.5	511.1
67.5°	7196.2	6028.0	2186.3	720.1	763.6	798.8	809.1	673.6	563.9	466.6	455.3
70°	6429.5	4839.2	842.2	678.7	733.6	749.1	706.7	617.7	518.4	434.6	424.2
72.5°	5029.6	3177.5	486.3	620.8	669.4	655.0	656.0	554.6	467.7	388.0	379.7
75°	3125.8	1150.6	432.5	552.5	567.0	593.9	559.8	481.1	402.5	354.9	344.5
77.5°	1033.6	327.0	400.4	476.0	508.0	488.4	468.7	410.8	344.5	307.3	302.1
80°	250.4	245.2	359.0	372.5	398.4	365.2	363.2	341.4	290.7	269.0	263.8
82.5°	154.2	175.9	285.6	231.8	265.9	269.0	306.3	281.4	212.1	220.4	213.1
85°	95.2	135.5	150.0	111.7	112.8	151.1	183.1	169.7	127.3	120.0	119.0
87.5°	32.1	27.9	32.1	23.8	32.1	54.8	82.8	78.6	52.8	36.2	34.1
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)