

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: P510040

Luminaire Tested: **VERD-M-CA4-190-740-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510040
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-7)
Test Lab: INNOVATION CENTER
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: VERD-M-CA4-190-740-U-T4-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 4000K, 870mA LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24865 lumens
Efficiency: N/A
Efficacy: 128.8 lumens/watt
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B2 - U0 - G5

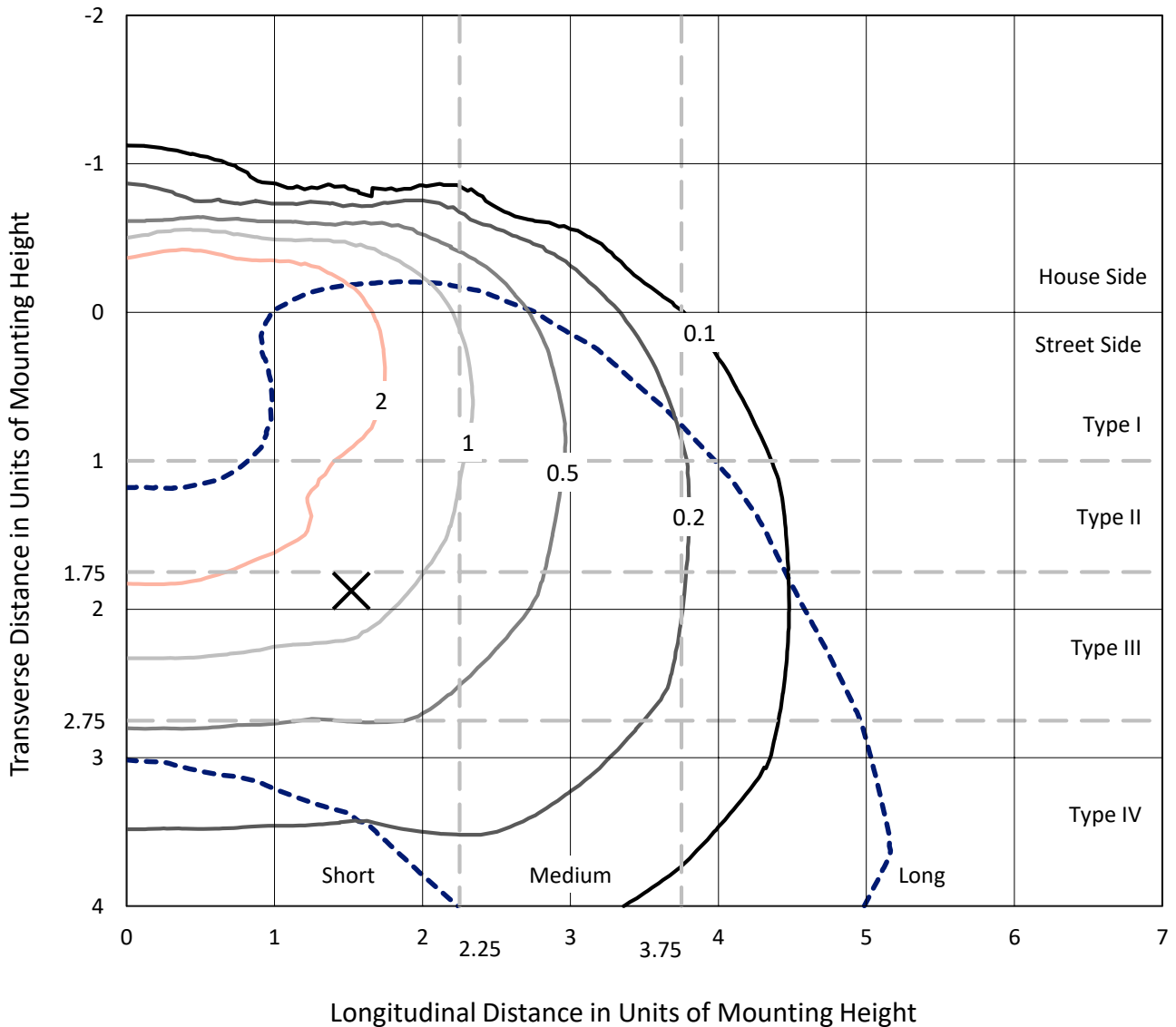
Input Watts (W): 193.1
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510040
 CATALOG NUMBER: VERD-M-CA4-190-740-U-T4-HSS

Iso-Footcandle Lines of Horizontal Illumination

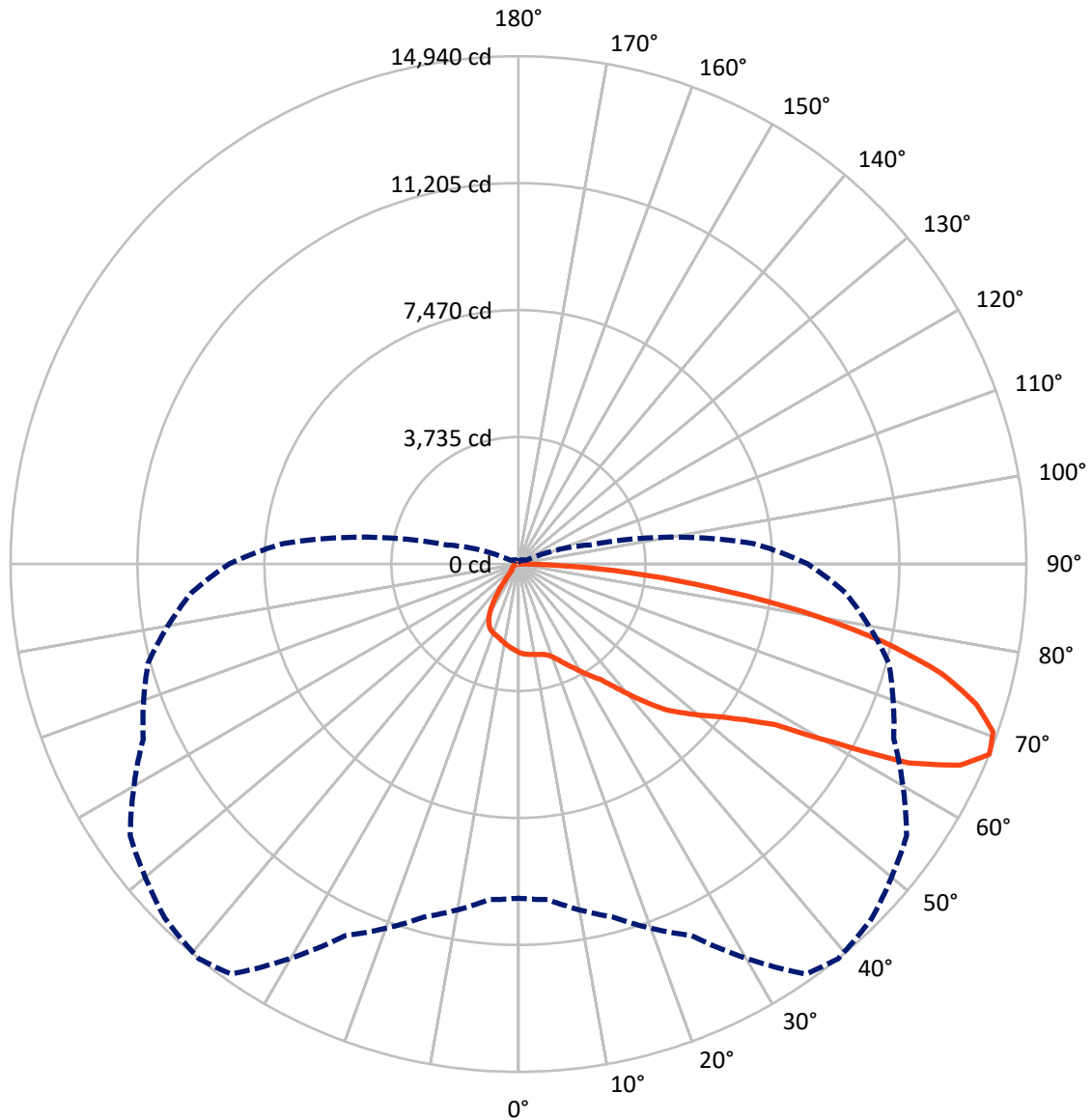
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 4.8 fc
 Type IV - Short - N/A

REPORT NUMBER: P510040
CATALOG NUMBER: VERD-M-CA4-190-740-U-T4-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 39-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

REPORT NUMBER: P510040

CATALOG NUMBER: VERD-M-CA4-190-740-U-T4-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3992.7	0.0	3992.7
	% Fixture	16.1	0.0	16.1
Street Side	Lumens	20872.3	0.0	20872.3
	% Fixture	83.9	0.0	83.9
Total	Lumens	24865.0	0.0	24865.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	245.8	1.0
10°-20°	731.6	2.9
20°-30°	1296.1	5.2
30°-40°	2076.0	8.3
40°-50°	3330.2	13.4
50°-60°	4867.9	19.6
60°-70°	6486.7	26.1
70°-80°	4867.7	19.6
80°-90°	963.1	3.9
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°	24865.0	100.0
0°-180°	24865.0	100.0

Coefficient of Utilization



REPORT NUMBER: P510040

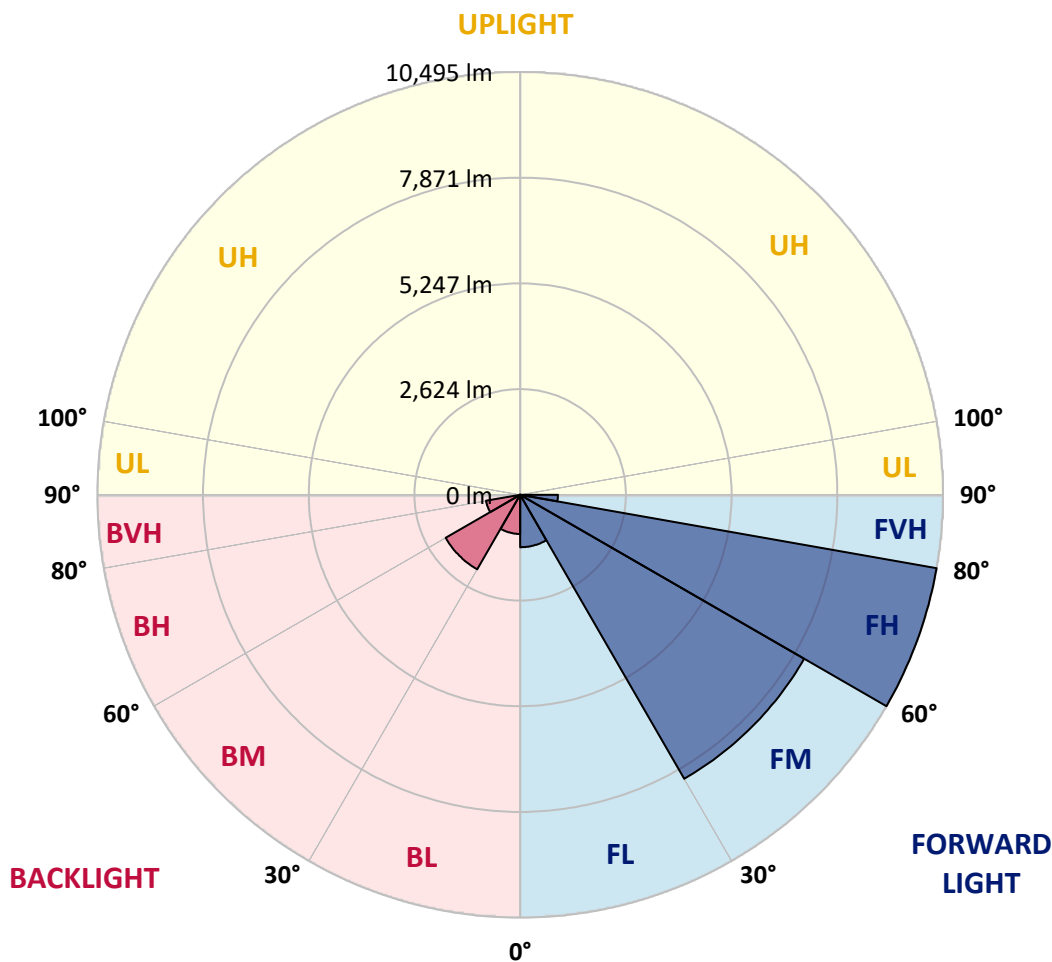
CATALOG NUMBER: VERD-M-CA4-190-740-U-T4-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1301.2	5.2			
FM (30°-60°)	8138.5	32.7			
FH (60°-80°)	10494.7	42.2			G4/12000
FVH (80°-90°)	937.9	3.8			G5
BL (0°-30°)	972.3	3.9	B2/1000		
BM (30°-60°)	2135.5	8.6	B2/2500		
BH (60°-80°)	859.7	3.5	B2/1000		G2/1000
BVH (80°-90°)	25.2	0.1			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G5

Type IV Short





REPORT NUMBER: P510040

CATALOG NUMBER: VERD-M-CA4-190-740-U-T4-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	2603.6	2603.6	2603.6	2603.6	2603.6	2603.6	2603.6	2603.6	2603.6	2603.6	2603.6
2.5°	2606.1	2641.1	2641.1	2631.1	2637.4	2642.4	2604.9	2614.9	2611.1	2609.9	2617.4
5°	2626.1	2664.8	2662.4	2649.9	2654.9	2664.8	2629.9	2644.9	2639.9	2627.4	2629.9
7.5°	2626.1	2658.6	2666.1	2652.4	2676.1	2688.6	2651.1	2664.8	2671.1	2662.4	2653.6
10°	2616.1	2644.9	2654.9	2652.4	2683.6	2703.6	2667.3	2706.1	2711.1	2711.1	2697.3
12.5°	2612.4	2644.9	2658.6	2669.8	2706.1	2727.3	2706.1	2743.6	2768.5	2767.3	2758.5
15°	2614.9	2651.1	2672.3	2691.1	2729.8	2756.1	2747.3	2804.8	2834.8	2843.5	2843.5
17.5°	2677.3	2721.1	2731.1	2751.1	2777.3	2817.3	2806.0	2879.7	2927.2	2942.2	2963.4
20°	2852.3	2886.0	2898.5	2888.5	2899.7	2924.7	2902.2	2973.4	3044.6	3084.6	3119.6
22.5°	3075.9	3100.9	3089.6	3079.6	3073.4	3079.6	3052.1	3099.6	3179.6	3237.0	3297.0
25°	3245.8	3300.8	3292.0	3264.5	3255.8	3263.3	3228.3	3287.0	3360.7	3420.7	3510.7
27.5°	3451.9	3485.7	3461.9	3451.9	3458.2	3456.9	3435.7	3491.9	3559.4	3634.3	3766.8
30°	3675.6	3704.3	3680.6	3670.6	3681.8	3689.3	3665.6	3764.3	3835.5	3916.7	4087.9
32.5°	4042.9	4111.6	4046.6	3916.7	3919.2	3930.4	3932.9	4065.4	4195.3	4259.0	4485.1
35°	4566.3	4621.3	4535.1	4377.7	4181.6	4174.1	4194.0	4391.4	4652.6	4942.4	5207.3
37.5°	5054.8	5134.8	5057.3	4873.7	4635.1	4577.6	4473.9	4708.8	5119.8	5743.2	6073.1
40°	5640.8	5700.8	5547.1	5387.2	5148.5	5067.3	4901.2	5051.1	5614.5	6579.0	6806.4
42.5°	6111.8	6148.0	6020.6	5853.2	5645.8	5584.6	5413.4	5427.1	6143.0	7311.2	7457.3
45°	6547.8	6586.5	6481.6	6339.2	6208.0	6134.3	6009.3	6076.8	6762.7	8083.2	7994.5
47.5°	6878.9	6917.6	6833.9	6732.7	6596.5	6546.6	6549.1	6791.4	7521.0	8700.4	8476.8
50°	7421.1	7406.1	7187.5	7077.5	6971.3	6997.6	7025.1	7369.9	8285.6	9230.1	8922.8
52.5°	8366.9	8293.1	7842.1	7554.8	7423.6	7468.6	7513.5	7972.1	9153.9	9713.6	9265.1
55°	9436.3	9361.3	8977.8	8363.1	8015.8	8088.2	8049.5	8568.0	9883.6	10178.4	9547.5
57.5°	10230.9	10354.6	10208.4	9873.6	9004.0	8909.1	8822.9	9170.2	10473.2	10643.2	9818.6
60°	10921.8	11094.2	11355.3	11264.1	10894.3	10646.9	9856.1	9873.6	11040.4	10965.5	9926.0
62.5°	11596.4	11697.6	12144.9	12243.6	12702.1	12879.5	12076.1	10783.1	11588.9	11189.1	9998.5
65°	10921.8	11051.7	11830.0	12548.4	14030.1	14267.5	13985.1	12429.7	11992.4	11321.5	9914.8
67.5°	9831.1	9909.8	10750.6	12057.4	14724.8	14939.6	14719.8	13941.4	12181.1	11281.6	9654.9
70°	8405.6	8529.3	9355.1	11106.7	14699.8	14814.7	14623.6	14123.8	12109.9	11051.7	8999.0
72.5°	6951.3	7021.3	7720.9	9468.8	13981.4	14077.6	13976.4	13844.0	11870.0	10410.8	7738.4
75°	5224.8	5239.7	5956.9	7477.3	12362.2	12864.5	12988.2	13361.7	10951.7	8924.1	5723.2
77.5°	3503.2	3651.8	4340.2	5714.5	10148.4	10951.7	11537.7	11810.0	9150.2	6660.2	3043.4
80°	1880.3	1917.7	2659.9	4055.4	7712.2	8480.5	9036.5	9041.5	6399.1	3299.5	679.6
82.5°	870.8	834.6	1339.3	2566.2	5342.2	5684.5	6056.8	5073.6	2562.4	563.5	173.7
85°	386.0	407.3	605.9	1250.6	2964.7	3308.3	3260.8	2246.3	449.8	152.4	106.2
87.5°	143.7	151.2	234.9	504.7	1058.2	1154.4	1038.2	432.3	58.7	53.7	32.5
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P510040

CATALOG NUMBER: VERD-M-CA4-190-740-U-T4-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	2603.6	2603.6	2603.6	2603.6	2603.6	2603.6	2603.6	2603.6	2603.6	2603.6	2603.6
2.5°	2608.6	2608.6	2606.1	2572.4	2564.9	2548.7	2534.9	2544.9	2533.7	2541.2	2533.7
5°	2619.9	2613.6	2598.6	2558.7	2539.9	2503.7	2476.2	2482.4	2467.5	2467.5	2466.2
7.5°	2646.1	2633.6	2607.4	2543.7	2508.7	2456.2	2413.7	2400.0	2385.0	2367.5	2365.0
10°	2688.6	2671.1	2636.1	2548.7	2481.2	2411.2	2337.5	2308.8	2271.3	2243.8	2238.8
12.5°	2747.3	2721.1	2673.6	2567.4	2478.7	2367.5	2268.8	2212.6	2167.6	2127.6	2118.9
15°	2832.3	2806.0	2749.8	2604.9	2479.9	2326.3	2196.3	2102.6	2025.2	1987.7	1989.0
17.5°	2955.9	2937.2	2851.0	2683.6	2503.7	2305.0	2136.4	1987.7	1867.8	1805.3	1796.6
20°	3114.6	3102.1	2997.2	2787.3	2558.7	2308.8	2071.4	1865.3	1689.1	1552.9	1522.9
22.5°	3299.5	3280.8	3152.1	2877.2	2601.1	2298.8	2000.2	1730.3	1465.5	1288.1	1253.1
25°	3505.7	3495.7	3294.5	2955.9	2606.1	2256.3	1897.8	1555.4	1223.1	1033.2	1003.2
27.5°	3769.3	3710.5	3423.2	2998.4	2594.9	2172.6	1751.6	1315.6	972.0	840.8	808.3
30°	4057.9	3939.2	3548.1	3030.9	2539.9	2038.9	1542.9	1038.2	723.4	607.2	590.9
32.5°	4377.7	4200.3	3665.6	3028.4	2442.5	1832.8	1271.8	720.9	488.5	441.0	424.8
35°	4956.1	4655.1	3806.7	2987.2	2278.8	1587.9	898.3	469.8	362.3	333.6	329.8
37.5°	5759.5	5248.5	3996.6	2908.5	2067.7	1303.1	585.9	321.1	309.8	311.1	309.8
40°	6417.9	5910.6	4260.3	2789.8	1801.6	930.8	351.1	286.1	292.3	296.1	297.3
42.5°	7062.5	6450.4	4586.3	2641.1	1522.9	604.7	284.9	273.6	268.6	274.9	277.4
45°	7581.0	6921.4	4893.7	2467.5	1196.9	357.3	276.1	253.6	244.9	247.4	251.1
47.5°	7995.8	7296.2	5078.6	2265.1	874.5	269.9	268.6	236.1	223.6	221.1	219.9
50°	8386.8	7617.2	5197.3	2020.2	557.2	259.9	248.6	216.1	201.1	198.6	198.6
52.5°	8652.9	7827.1	5237.2	1730.3	332.3	253.6	234.9	199.9	179.9	183.7	186.2
55°	8912.8	8039.5	5154.8	1353.0	254.9	237.4	219.9	179.9	163.7	178.7	183.7
57.5°	9036.5	8070.8	4968.6	940.8	247.4	214.9	198.6	161.2	148.7	157.4	157.4
60°	9136.4	8049.5	4708.8	595.9	241.1	199.9	181.2	146.2	131.2	126.2	122.4
62.5°	9070.2	7964.6	4186.5	388.5	223.6	182.4	164.9	134.9	113.7	99.9	98.7
65°	8929.1	7664.7	3342.0	306.1	207.4	173.7	149.9	121.2	99.9	83.7	82.5
67.5°	8513.0	6935.1	2162.6	253.6	198.6	167.4	138.7	112.4	88.7	72.5	71.2
70°	7516.0	5602.1	663.4	227.4	206.1	161.2	136.2	102.4	78.7	63.7	61.2
72.5°	5943.1	3743.0	246.1	188.7	177.4	154.9	132.4	92.5	67.5	53.7	51.2
75°	3828.0	1223.1	208.6	146.2	151.2	147.4	122.4	85.0	57.5	43.7	42.5
77.5°	1084.4	256.1	189.9	107.4	133.7	142.4	107.4	71.2	51.2	37.5	36.2
80°	227.4	182.4	173.7	76.2	99.9	92.5	72.5	55.0	48.7	32.5	32.5
82.5°	148.7	144.9	148.7	52.5	66.2	67.5	57.5	47.5	42.5	30.0	30.0
85°	104.9	132.4	71.2	37.5	31.2	28.7	33.7	41.2	37.5	25.0	25.0
87.5°	36.2	21.2	15.0	15.0	13.7	13.7	16.2	18.7	20.0	20.0	18.7
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)