

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: P510192

Luminaire Tested: **VERD-M-CA4-220-750-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510192
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-CA4-220-750-U-T4-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 5000K, 1000mA LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 28573 lumens
Efficiency: N/A
Efficacy: 128.4 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

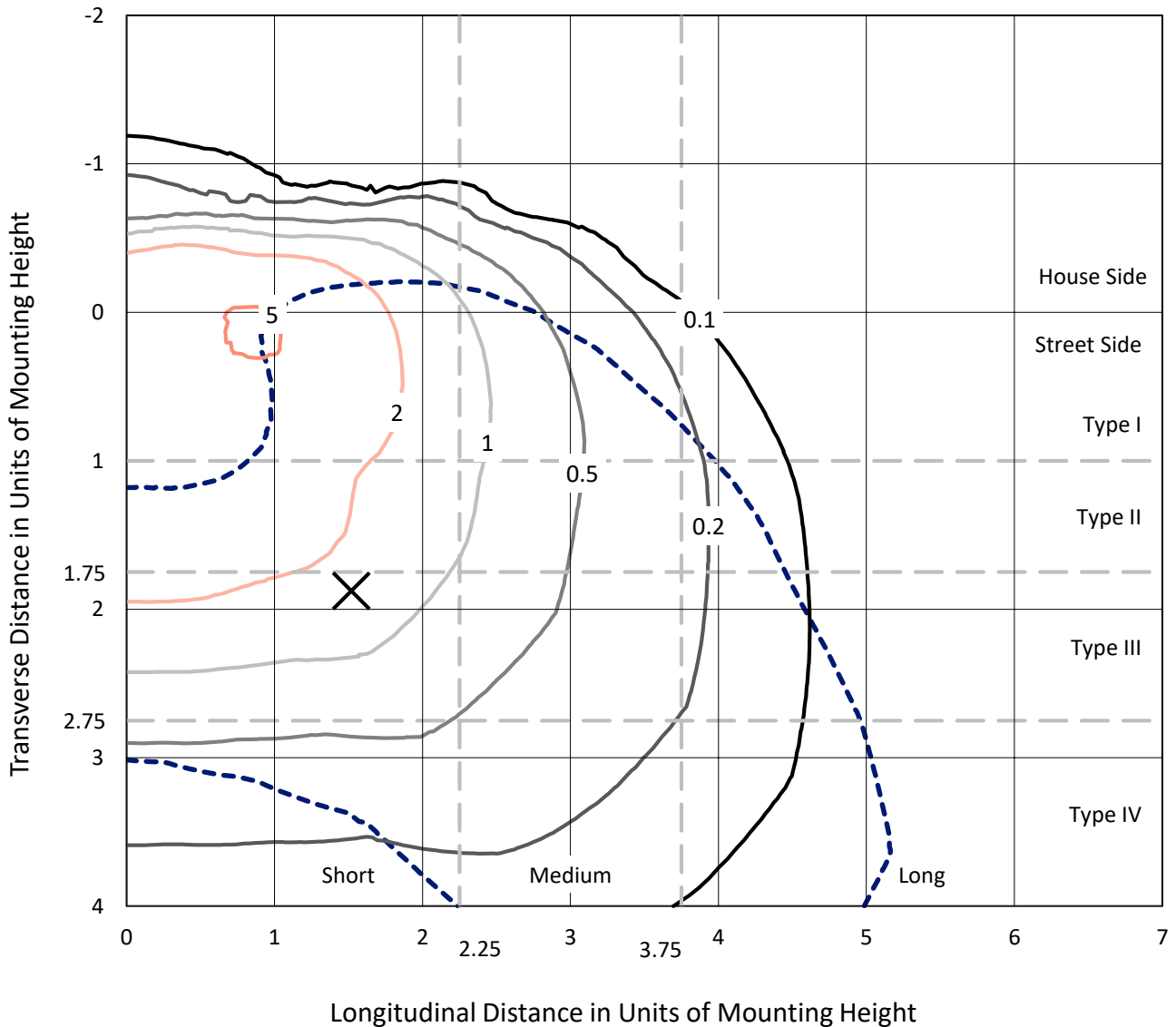
Input Watts (W): 222.5
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510192
 CATALOG NUMBER: VERD-M-CA4-220-750-U-T4-HSS

Iso-Footcandle Lines of Horizontal Illumination

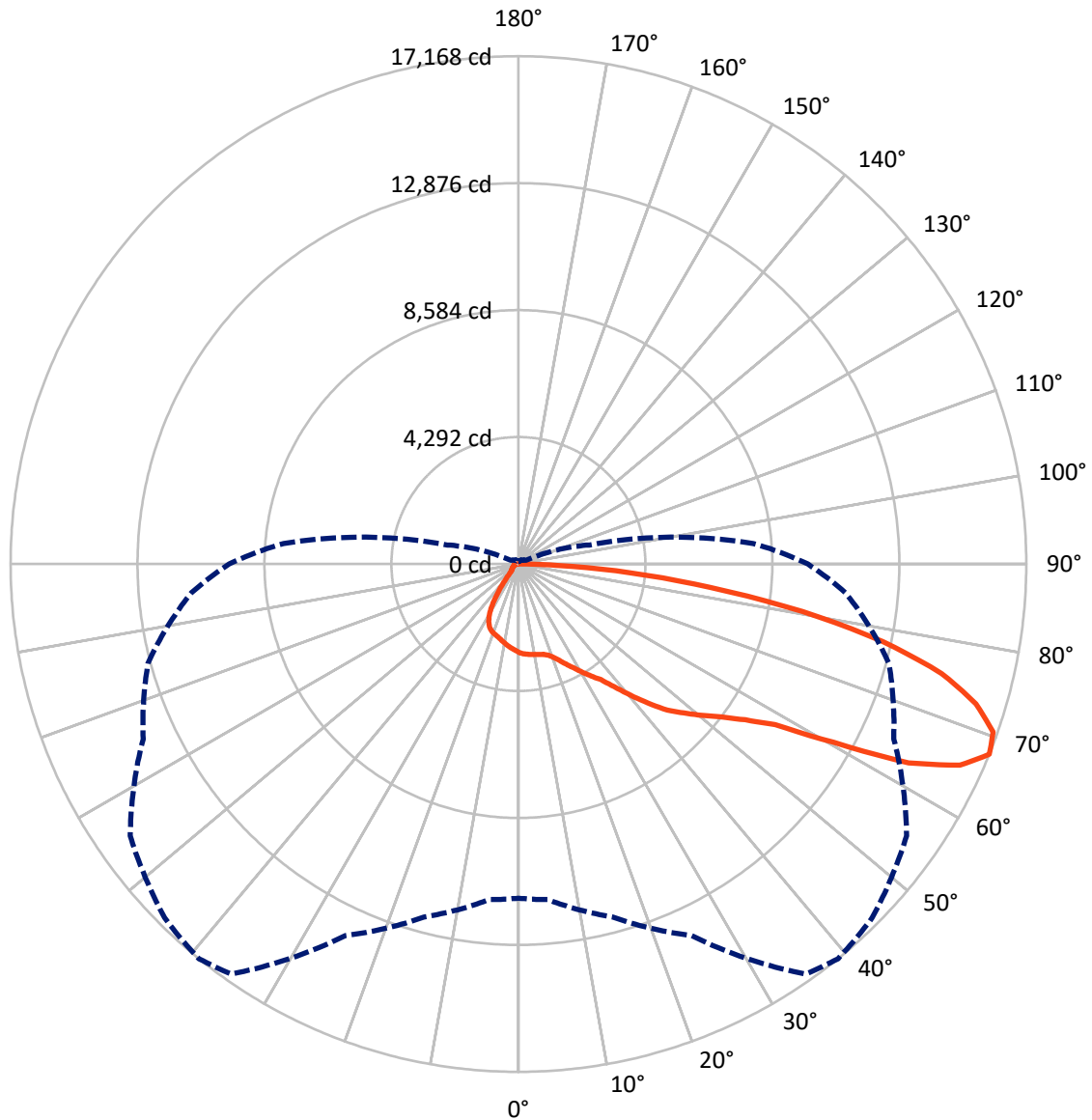
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.5 fc
 Type IV - Short - N/A

REPORT NUMBER: P510192
CATALOG NUMBER: VERD-M-CA4-220-750-U-T4-HSS

Luminous Intensity Polar Plot



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

REPORT NUMBER: P510192

CATALOG NUMBER: VERD-M-CA4-220-750-U-T4-HSS

FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4588.1	0.0	4588.1
	% Fixture	16.1	0.0	16.1
Street Side	Lumens	23984.9	0.0	23984.9
	% Fixture	83.9	0.0	83.9
Total	Lumens	28573.0	0.0	28573.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	282.5	1.0
10°-20°	840.7	2.9
20°-30°	1489.4	5.2
30°-40°	2385.5	8.3
40°-50°	3826.9	13.4
50°-60°	5593.8	19.6
60°-70°	7454.0	26.1
70°-80°	5593.6	19.6
80°-90°	1106.7	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°	28573.0	100.0
0°-180°	28573.0	100.0

Coefficient of Utilization



REPORT NUMBER: P510192

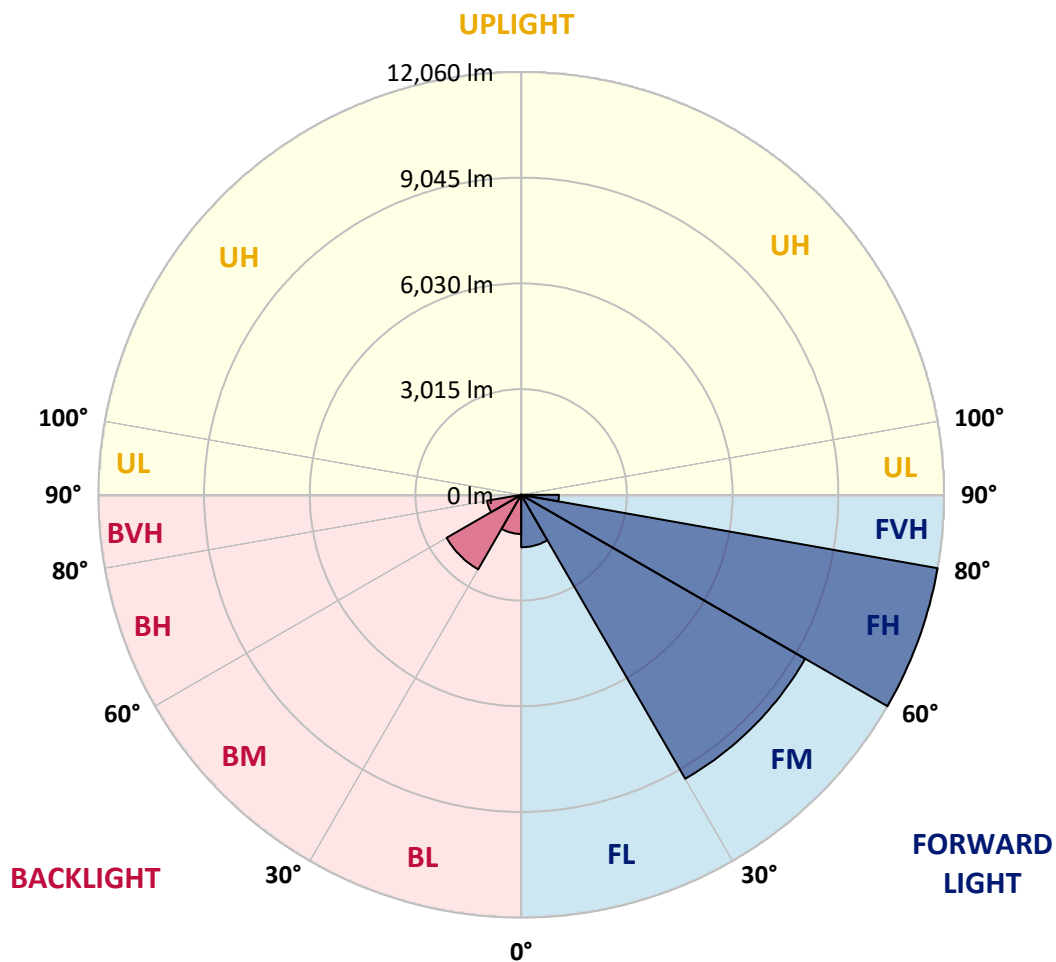
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	1495.3	5.2			
FM	(30°-60°)	9352.2	32.7			
FH	(60°-80°)	12059.7	42.2			G5
FVH	(80°-90°)	1077.7	3.8			G5
BL	(0°-30°)	1117.2	3.9	B3/2500		
BM	(30°-60°)	2454.0	8.6	B2/2500		
BH	(60°-80°)	987.9	3.5	B2/1000		G2/1000
BVH	(80°-90°)	29.0	0.1			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





REPORT NUMBER: P510192

CATALOG NUMBER: VERD-M-CA4-220-750-U-T4-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	2991.9	2991.9	2991.9	2991.9	2991.9	2991.9	2991.9	2991.9	2991.9	2991.9	2991.9
2.5°	2994.8	3035.0	3035.0	3023.5	3030.7	3036.4	2993.3	3004.8	3000.5	2999.1	3007.7
5°	3017.7	3062.2	3059.4	3045.0	3050.8	3062.2	3022.0	3039.3	3033.5	3019.2	3022.0
7.5°	3017.7	3055.1	3063.7	3047.9	3075.2	3089.5	3046.5	3062.2	3069.4	3059.4	3049.3
10°	3006.3	3039.3	3050.8	3047.9	3083.8	3106.8	3065.1	3109.6	3115.4	3115.4	3099.6
12.5°	3001.9	3039.3	3055.1	3068.0	3109.6	3134.0	3109.6	3152.7	3181.4	3180.0	3169.9
15°	3004.8	3046.5	3070.9	3092.4	3136.9	3167.0	3157.0	3223.0	3257.5	3267.5	3267.5
17.5°	3076.6	3126.8	3138.3	3161.3	3191.5	3237.4	3224.5	3309.2	3363.7	3381.0	3405.4
20°	3277.6	3316.4	3330.7	3319.2	3332.1	3360.9	3335.0	3416.9	3498.7	3544.6	3584.8
22.5°	3534.6	3563.3	3550.4	3538.9	3531.7	3538.9	3507.3	3561.9	3653.7	3719.8	3788.7
25°	3729.8	3793.0	3782.9	3751.4	3741.3	3749.9	3709.7	3777.2	3861.9	3930.8	4034.2
27.5°	3966.7	4005.5	3978.2	3966.7	3973.9	3972.4	3948.0	4012.6	4090.2	4176.3	4328.5
30°	4223.7	4256.7	4229.4	4217.9	4230.9	4239.5	4212.2	4325.6	4407.5	4500.8	4697.5
32.5°	4645.8	4724.7	4650.1	4500.8	4503.6	4516.6	4519.4	4671.6	4820.9	4894.1	5154.0
35°	5247.3	5310.5	5211.4	5030.5	4805.1	4796.5	4819.5	5046.3	5346.4	5679.4	5983.8
37.5°	5808.6	5900.5	5811.5	5600.5	5326.3	5260.2	5141.1	5411.0	5883.3	6599.7	6978.7
40°	6482.0	6550.9	6374.3	6190.5	5916.3	5823.0	5632.1	5804.3	6451.8	7560.1	7821.4
42.5°	7023.2	7064.8	6918.4	6726.0	6487.7	6417.4	6220.7	6236.5	7059.1	8401.4	8569.4
45°	7524.3	7568.8	7448.2	7284.5	7133.8	7049.0	6905.5	6983.0	7771.2	9288.7	9186.7
47.5°	7904.7	7949.2	7853.0	7736.7	7580.2	7522.8	7525.7	7804.2	8642.6	9997.9	9740.9
50°	8527.8	8510.5	8259.3	8133.0	8010.9	8041.1	8072.7	8468.9	9521.2	10606.6	10253.4
52.5°	9614.6	9529.9	9011.6	8681.4	8530.6	8582.3	8634.0	9160.9	10519.0	11162.2	10646.8
55°	10843.5	10757.3	10316.6	9610.3	9211.1	9294.4	9249.9	9845.7	11357.4	11696.3	10971.3
57.5°	11756.6	11898.7	11730.7	11346.0	10346.7	10237.6	10138.6	10537.7	12035.1	12230.3	11282.8
60°	12550.5	12748.6	13048.6	12943.8	12518.9	12234.6	11325.9	11346.0	12686.9	12600.7	11406.3
62.5°	13325.7	13442.0	13956.0	14069.4	14596.3	14800.1	13877.0	12391.1	13317.1	12857.7	11489.5
65°	12550.5	12699.8	13594.2	14419.7	16122.4	16395.1	16070.7	14283.3	13780.8	13009.9	11393.3
67.5°	11297.1	11387.6	12353.8	13855.5	16920.6	17167.5	16914.8	16020.4	13997.6	12963.9	11094.7
70°	9659.1	9801.2	10750.2	12762.9	16891.9	17024.0	16804.3	16230.0	13915.8	12699.8	10341.0
72.5°	7988.0	8068.4	8872.3	10880.8	16066.4	16176.9	16060.6	15908.5	13640.1	11963.3	8892.4
75°	6003.9	6021.1	6845.2	8592.4	14205.8	14782.9	14925.0	15354.3	12584.9	10254.9	6576.7
77.5°	4025.6	4196.4	4987.5	6566.7	11661.8	12584.9	13258.2	13571.2	10514.7	7653.5	3497.2
80°	2160.7	2203.7	3056.5	4660.1	8862.3	9745.2	10384.1	10389.8	7353.4	3791.6	781.0
82.5°	1000.6	959.0	1539.0	2948.8	6138.8	6532.2	6960.0	5830.2	2944.5	647.5	199.6
85°	443.6	468.0	696.3	1437.1	3406.8	3801.6	3747.1	2581.3	516.8	175.1	122.0
87.5°	165.1	173.7	269.9	580.0	1216.0	1326.5	1193.0	496.7	67.5	61.7	37.3
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°	2991.9	2991.9	2991.9	2991.9	2991.9	2991.9	2991.9	2991.9	2991.9	2991.9	2991.9
2.5°	2997.6	2997.6	2994.8	2956.0	2947.4	2928.7	2912.9	2924.4	2911.5	2920.1	2911.5
5°	3010.6	3003.4	2986.2	2940.2	2918.7	2877.0	2845.5	2852.6	2835.4	2835.4	2834.0
7.5°	3040.7	3026.4	2996.2	2923.0	2882.8	2822.5	2773.7	2757.9	2740.7	2720.6	2717.7
10°	3089.5	3069.4	3029.2	2928.7	2851.2	2770.8	2686.1	2653.1	2610.0	2578.4	2572.7
12.5°	3157.0	3126.8	3072.3	2950.3	2848.3	2720.6	2607.1	2542.5	2490.9	2444.9	2434.9
15°	3254.6	3224.5	3159.9	2993.3	2849.8	2673.2	2523.9	2416.2	2327.2	2284.1	2285.6
17.5°	3396.8	3375.2	3276.2	3083.8	2877.0	2648.8	2455.0	2284.1	2146.3	2074.5	2064.5
20°	3579.1	3564.7	3444.1	3202.9	2940.2	2653.1	2380.3	2143.4	1941.0	1784.5	1750.1
22.5°	3791.6	3770.0	3622.1	3306.3	2989.0	2641.6	2298.5	1988.4	1684.0	1480.2	1440.0
25°	4028.4	4017.0	3785.8	3396.8	2994.8	2592.8	2180.8	1787.4	1405.5	1187.3	1152.8
27.5°	4331.4	4263.9	3933.7	3445.6	2981.8	2496.6	2012.8	1511.7	1116.9	966.2	928.9
30°	4663.0	4526.6	4077.3	3482.9	2918.7	2343.0	1773.0	1193.0	831.2	697.7	679.1
32.5°	5030.5	4826.7	4212.2	3480.0	2806.7	2106.1	1461.5	828.4	561.3	506.8	488.1
35°	5695.2	5349.2	4374.4	3432.6	2618.6	1824.7	1032.2	539.8	416.3	383.3	379.0
37.5°	6618.4	6031.2	4592.6	3342.2	2376.0	1497.4	673.3	369.0	356.0	357.5	356.0
40°	7374.9	6792.1	4895.6	3205.8	2070.2	1069.6	403.4	328.8	335.9	340.2	341.7
42.5°	8115.7	7412.3	5270.3	3035.0	1750.1	694.9	327.3	314.4	308.7	315.8	318.7
45°	8711.5	7953.5	5623.4	2835.4	1375.4	410.6	317.3	291.4	281.4	284.3	288.6
47.5°	9188.2	8384.2	5835.9	2602.8	1005.0	310.1	308.7	271.3	257.0	254.1	252.7
50°	9637.5	8753.2	5972.3	2321.4	640.3	298.6	285.7	248.4	231.1	228.3	228.3
52.5°	9943.3	8994.4	6018.3	1988.4	381.9	291.4	269.9	229.7	206.7	211.0	213.9
55°	10241.9	9238.4	5923.5	1554.8	292.9	272.8	252.7	206.7	188.1	205.3	211.0
57.5°	10384.1	9274.3	5709.6	1081.0	284.3	246.9	228.3	185.2	170.8	180.9	180.9
60°	10498.9	9249.9	5411.0	684.8	277.1	229.7	208.2	168.0	150.7	145.0	140.7
62.5°	10422.8	9152.3	4810.9	446.5	257.0	209.6	189.5	155.1	130.6	114.9	113.4
65°	10260.6	8807.7	3840.4	351.7	238.3	199.6	172.3	139.3	114.9	96.2	94.8
67.5°	9782.5	7969.3	2485.1	291.4	228.3	192.4	159.4	129.2	101.9	83.3	81.8
70°	8636.9	6437.5	762.3	261.3	236.9	185.2	156.5	117.7	90.4	73.2	70.3
72.5°	6829.4	4301.2	282.8	216.8	203.9	178.0	152.2	106.2	77.5	61.7	58.9
75°	4398.8	1405.5	239.8	168.0	173.7	169.4	140.7	97.6	66.0	50.2	48.8
77.5°	1246.1	294.3	218.2	123.5	153.6	163.7	123.5	81.8	58.9	43.1	41.6
80°	261.3	209.6	199.6	87.6	114.9	106.2	83.3	63.2	56.0	37.3	37.3
82.5°	170.8	166.5	170.8	60.3	76.1	77.5	66.0	54.6	48.8	34.5	34.5
85°	120.6	152.2	81.8	43.1	35.9	33.0	38.8	47.4	43.1	28.7	28.7
87.5°	41.6	24.4	17.2	17.2	15.8	15.8	18.7	21.5	23.0	23.0	21.5
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)