

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: P510136

Luminaire Tested: **VERD-M-CA4-210-740-U-T4-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510136
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-CA4-210-740-U-T4-HSS
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE
(4) 70 CRI, 4000K, 960mA LEDS AND TYPE IV OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 27080 lumens
Efficiency: N/A
Efficacy: 126.8 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

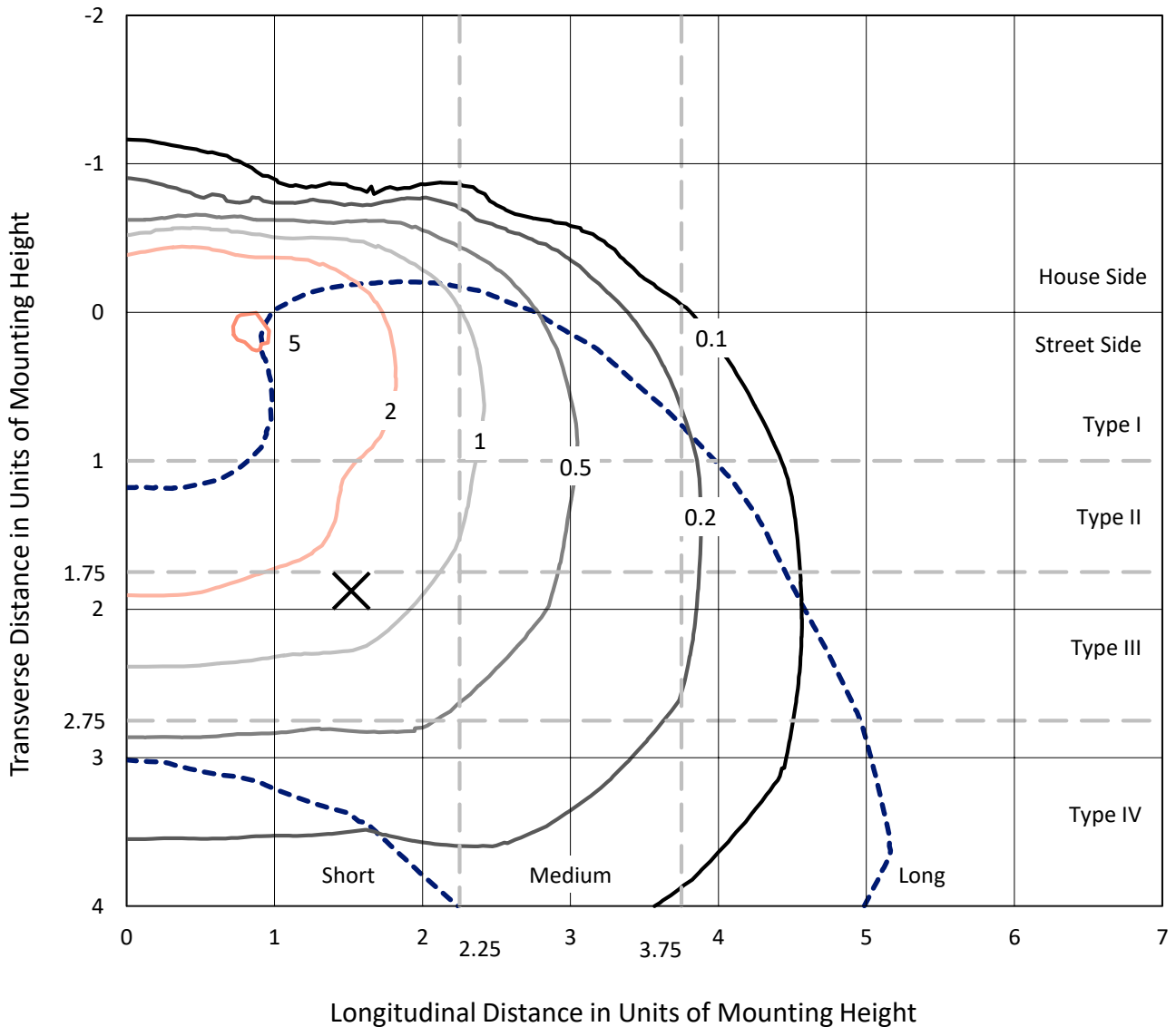
Input Watts (W): 213.6
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

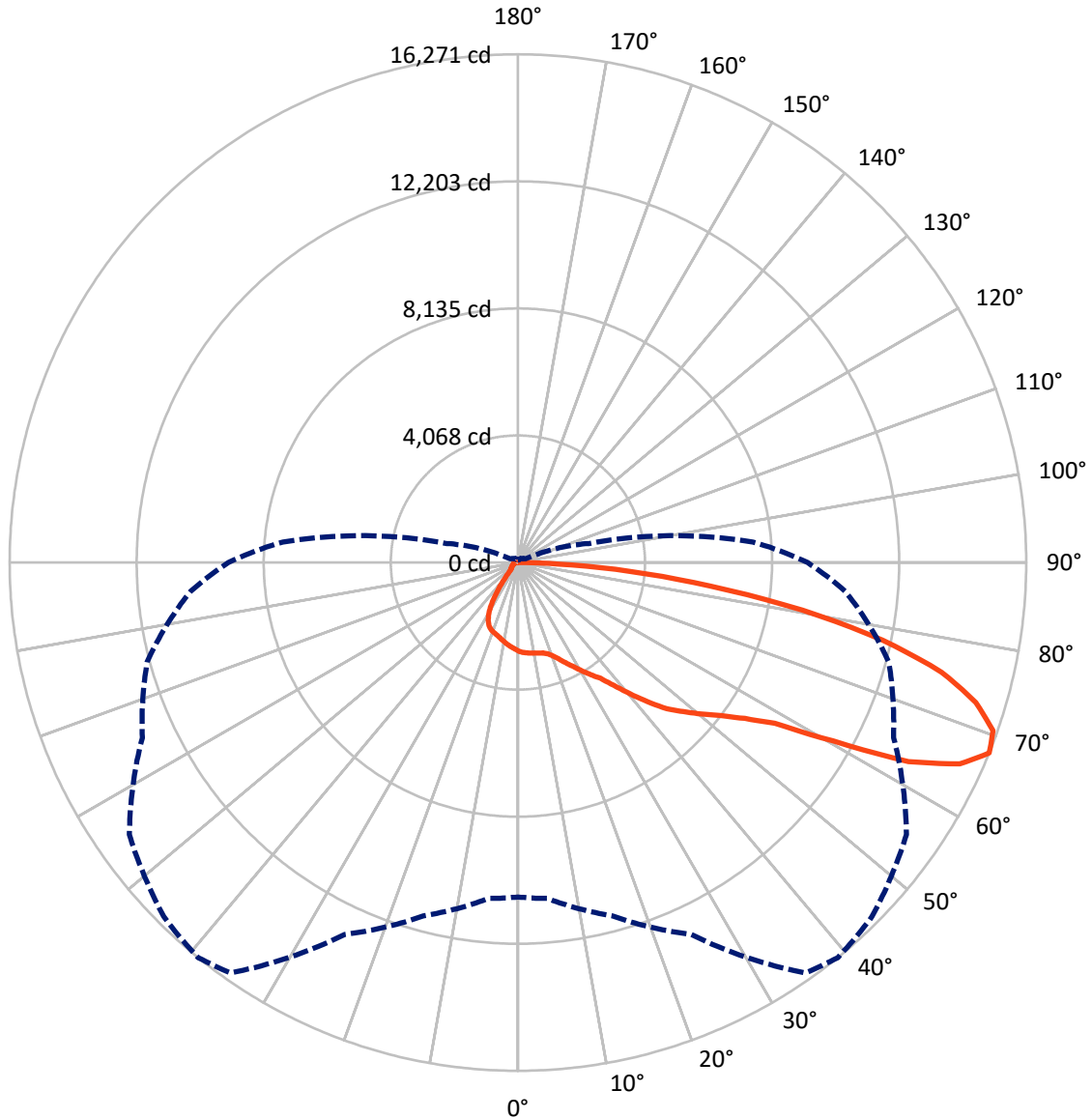
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 5.2 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



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

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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4348.4	0.0	4348.4
	% Fixture	16.1	0.0	16.1
Street Side	Lumens	22731.6	0.0	22731.6
	% Fixture	83.9	0.0	83.9
Total	Lumens	27080.0	0.0	27080.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	267.7	1.0
10°-20°	796.7	2.9
20°-30°	1411.6	5.2
30°-40°	2260.9	8.3
40°-50°	3626.9	13.4
50°-60°	5301.5	19.6
60°-70°	7064.5	26.1
70°-80°	5301.3	19.6
80°-90°	1048.9	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°	27080.0	100.0
0°-180°	27080.0	100.0

Coefficient of Utilization



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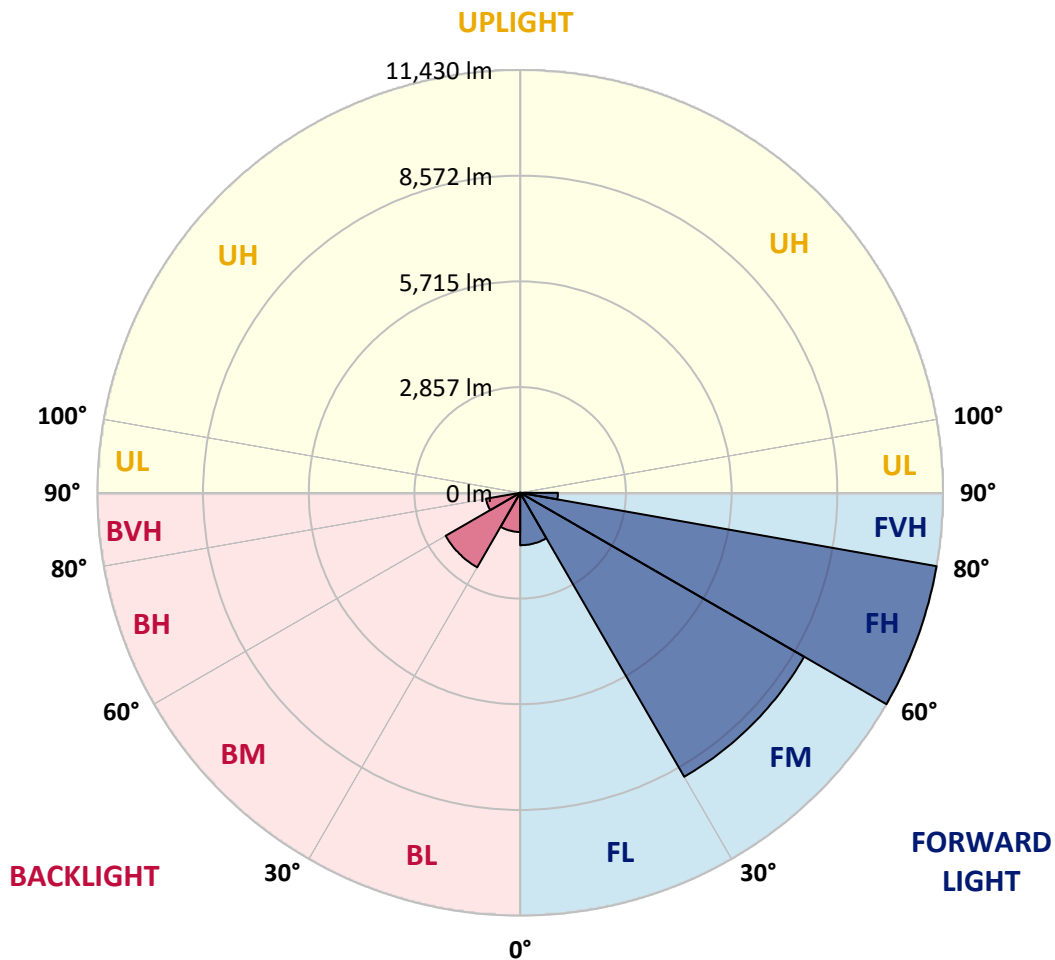
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1417.1	5.2			
FM (30°-60°)	8863.5	32.7			
FH (60°-80°)	11429.6	42.2			G4/12000
FVH (80°-90°)	1021.4	3.8			G5
BL (0°-30°)	1058.9	3.9	B3/2500		
BM (30°-60°)	2325.8	8.6	B2/2500		
BH (60°-80°)	936.3	3.5	B2/1000		G2/1000
BVH (80°-90°)	27.5	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





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	39°	45°	55°	65°	75°	85°
0°	2835.6	2835.6	2835.6	2835.6	2835.6	2835.6	2835.6	2835.6	2835.6	2835.6	2835.6
2.5°	2838.3	2876.4	2876.4	2865.5	2872.3	2877.7	2836.9	2847.8	2843.7	2842.4	2850.5
5°	2860.1	2902.2	2899.5	2885.9	2891.4	2902.2	2864.1	2880.5	2875.0	2861.4	2864.1
7.5°	2860.1	2895.4	2903.6	2888.6	2914.5	2928.1	2887.3	2902.2	2909.0	2899.5	2890.0
10°	2849.2	2880.5	2891.4	2888.6	2922.6	2944.4	2905.0	2947.1	2952.6	2952.6	2937.6
12.5°	2845.1	2880.5	2895.4	2907.7	2947.1	2970.3	2947.1	2988.0	3015.2	3013.8	3004.3
15°	2847.8	2887.3	2910.4	2930.8	2973.0	3001.6	2992.0	3054.6	3087.3	3096.8	3096.8
17.5°	2915.8	2963.5	2974.3	2996.1	3024.7	3068.2	3056.0	3136.3	3188.0	3204.3	3227.4
20°	3106.3	3143.1	3156.7	3145.8	3158.0	3185.2	3160.8	3238.3	3315.9	3359.4	3397.5
22.5°	3349.9	3377.1	3364.9	3354.0	3347.2	3354.0	3324.0	3375.7	3462.8	3525.4	3590.7
25°	3534.9	3594.8	3585.3	3555.3	3545.8	3554.0	3515.9	3579.8	3660.1	3725.4	3823.4
27.5°	3759.4	3796.2	3770.3	3759.4	3766.2	3764.9	3741.7	3803.0	3876.5	3958.1	4102.3
30°	4003.0	4034.3	4008.4	3997.5	4009.8	4018.0	3992.1	4099.6	4177.2	4265.6	4452.0
32.5°	4403.0	4477.9	4407.1	4265.6	4268.3	4280.6	4283.3	4427.5	4569.0	4638.4	4884.7
35°	4973.1	5033.0	4939.1	4767.7	4554.0	4545.9	4567.7	4782.6	5067.0	5382.7	5671.1
37.5°	5505.1	5592.2	5507.9	5307.8	5048.0	4985.4	4872.4	5128.2	5575.9	6254.8	6614.1
40°	6143.3	6208.6	6041.2	5867.1	5607.2	5518.7	5337.8	5501.1	6114.7	7165.1	7412.7
42.5°	6656.2	6695.7	6556.9	6374.6	6148.7	6082.0	5895.6	5910.6	6690.2	7962.4	8121.6
45°	7131.1	7173.3	7059.0	6903.9	6761.0	6680.7	6544.7	6618.1	7365.1	8803.3	8706.7
47.5°	7491.7	7533.8	7442.7	7332.5	7184.2	7129.7	7132.5	7396.4	8191.0	9475.5	9231.9
50°	8082.2	8065.8	7827.7	7708.0	7592.3	7620.9	7650.9	8026.4	9023.7	10052.4	9717.7
52.5°	9112.2	9031.9	8540.7	8227.8	8084.9	8133.9	8182.9	8682.2	9969.4	10578.9	10090.5
55°	10276.9	10195.2	9777.5	9108.1	8729.8	8808.8	8766.6	9331.2	10764.0	11085.1	10398.0
57.5°	11142.2	11276.9	11117.8	10753.1	9806.1	9702.7	9608.8	9987.1	11406.2	11591.3	10693.2
60°	11894.7	12082.4	12366.8	12267.5	11864.7	11595.3	10734.1	10753.1	12023.9	11942.3	10810.3
62.5°	12629.4	12739.6	13226.7	13334.2	13833.6	14026.8	13151.9	11743.6	12621.3	12185.9	10889.2
65°	11894.7	12036.2	12883.9	13666.2	15279.9	15538.5	15231.0	13537.0	13060.7	12330.1	10798.0
67.5°	10706.8	10792.6	11708.3	13131.5	16036.5	16270.5	16031.0	15183.3	13266.2	12286.5	10515.0
70°	9154.4	9289.1	10188.4	12096.1	16009.2	16134.4	15926.2	15382.0	13188.6	12036.2	9800.7
72.5°	7570.6	7646.8	8408.7	10312.3	15226.9	15331.6	15221.4	15077.2	12927.4	11338.2	8427.8
75°	5690.2	5706.5	6487.5	8143.4	13463.5	14010.5	14145.2	14552.0	11927.3	9719.0	6233.1
77.5°	3815.2	3977.1	4726.8	6223.5	11052.4	11927.3	12565.5	12862.1	9965.3	7253.5	3314.5
80°	2047.8	2088.6	2896.8	4416.6	8399.2	9236.0	9841.5	9846.9	6969.2	3593.4	740.2
82.5°	948.4	908.9	1458.6	2794.7	5818.1	6190.9	6596.4	5525.5	2790.7	613.6	189.1
85°	420.4	443.6	659.9	1362.0	3228.8	3603.0	3551.3	2446.4	489.8	166.0	115.7
87.5°	156.5	164.6	255.8	549.7	1152.5	1257.2	1130.7	470.8	63.9	58.5	35.4
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°	2835.6	2835.6	2835.6	2835.6	2835.6	2835.6	2835.6	2835.6	2835.6	2835.6	2835.6
2.5°	2841.0	2841.0	2838.3	2801.5	2793.4	2775.7	2760.7	2771.6	2759.4	2767.5	2759.4
5°	2853.3	2846.5	2830.1	2786.6	2766.2	2726.7	2696.8	2703.6	2687.3	2687.3	2685.9
7.5°	2881.8	2868.2	2839.6	2770.3	2732.2	2675.0	2628.7	2613.8	2597.5	2578.4	2575.7
10°	2928.1	2909.0	2870.9	2775.7	2702.2	2626.0	2545.7	2514.5	2473.6	2443.7	2438.3
12.5°	2992.0	2963.5	2911.8	2796.1	2699.5	2578.4	2470.9	2409.7	2360.7	2317.2	2307.6
15°	3084.6	3056.0	2994.8	2836.9	2700.9	2533.5	2392.0	2290.0	2205.6	2164.8	2166.1
17.5°	3219.3	3198.9	3105.0	2922.6	2726.7	2510.4	2326.7	2164.8	2034.2	1966.1	1956.6
20°	3392.1	3378.5	3264.2	3035.6	2786.6	2514.5	2255.9	2031.4	1839.6	1691.3	1658.6
22.5°	3593.4	3573.0	3432.9	3133.5	2832.8	2503.6	2178.4	1884.5	1596.0	1402.8	1364.7
25°	3817.9	3807.1	3588.0	3219.3	2838.3	2457.3	2066.8	1694.0	1332.1	1125.2	1092.6
27.5°	4105.0	4041.1	3728.1	3265.5	2826.0	2366.1	1907.6	1432.7	1058.6	915.7	880.3
30°	4419.3	4290.1	3864.2	3300.9	2766.2	2220.6	1680.4	1130.7	787.8	661.3	643.6
32.5°	4767.7	4574.5	3992.1	3298.2	2660.0	1996.1	1385.1	785.1	532.0	480.3	462.6
35°	5397.6	5069.7	4145.9	3253.3	2481.8	1729.4	978.3	511.6	394.6	363.3	359.2
37.5°	6272.5	5716.0	4352.7	3167.6	2251.9	1419.1	638.1	349.7	337.4	338.8	337.4
40°	6989.6	6437.2	4639.8	3038.3	1962.0	1013.7	382.3	311.6	318.4	322.5	323.8
42.5°	7691.7	7025.0	4994.9	2876.4	1658.6	658.5	310.2	298.0	292.5	299.3	302.1
45°	8256.3	7537.9	5329.6	2687.3	1303.5	389.1	300.7	276.2	266.7	269.4	273.5
47.5°	8708.1	7946.1	5531.0	2466.8	952.4	293.9	292.5	257.2	243.6	240.8	239.5
50°	9133.9	8295.8	5660.2	2200.1	606.8	283.0	270.8	235.4	219.1	216.3	216.3
52.5°	9423.8	8524.4	5703.8	1884.5	361.9	276.2	255.8	217.7	195.9	200.0	202.7
55°	9706.8	8755.7	5614.0	1473.6	277.6	258.5	239.5	195.9	178.2	194.6	200.0
57.5°	9841.5	8789.7	5411.2	1024.6	269.4	234.0	216.3	175.5	161.9	171.4	171.4
60°	9950.3	8766.6	5128.2	649.0	262.6	217.7	197.3	159.2	142.9	137.4	133.3
62.5°	9878.2	8674.1	4559.5	423.2	243.6	198.7	179.6	146.9	123.8	108.9	107.5
65°	9724.5	8347.5	3639.7	333.4	225.9	189.1	163.3	132.0	108.9	91.2	89.8
67.5°	9271.4	7552.9	2355.3	276.2	216.3	182.3	151.0	122.5	96.6	78.9	77.6
70°	8185.6	6101.1	722.5	247.6	224.5	175.5	148.3	111.6	85.7	69.4	66.7
72.5°	6472.5	4076.5	268.0	205.5	193.2	168.7	144.2	100.7	73.5	58.5	55.8
75°	4169.0	1332.1	227.2	159.2	164.6	160.6	133.3	92.5	62.6	47.6	46.3
77.5°	1181.0	278.9	206.8	117.0	145.6	155.1	117.0	77.6	55.8	40.8	39.5
80°	247.6	198.7	189.1	83.0	108.9	100.7	78.9	59.9	53.1	35.4	35.4
82.5°	161.9	157.8	161.9	57.1	72.1	73.5	62.6	51.7	46.3	32.7	32.7
85°	114.3	144.2	77.6	40.8	34.0	31.3	36.7	44.9	40.8	27.2	27.2
87.5°	39.5	23.1	16.3	16.3	15.0	15.0	17.7	20.4	21.8	21.8	20.4
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)