

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: P510118

Luminaire Tested: **VERD-M-CA4-210-727-U-T3-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510118  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-5)  
Test Lab: INNOVATION CENTER  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: VERD-M-CA4-210-727-U-T3-HSS  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(4) 70 CRI, 2700K, 960mA LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 23814 lumens  
Efficiency: N/A  
Efficacy: 111.5 lumens/watt  
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G4

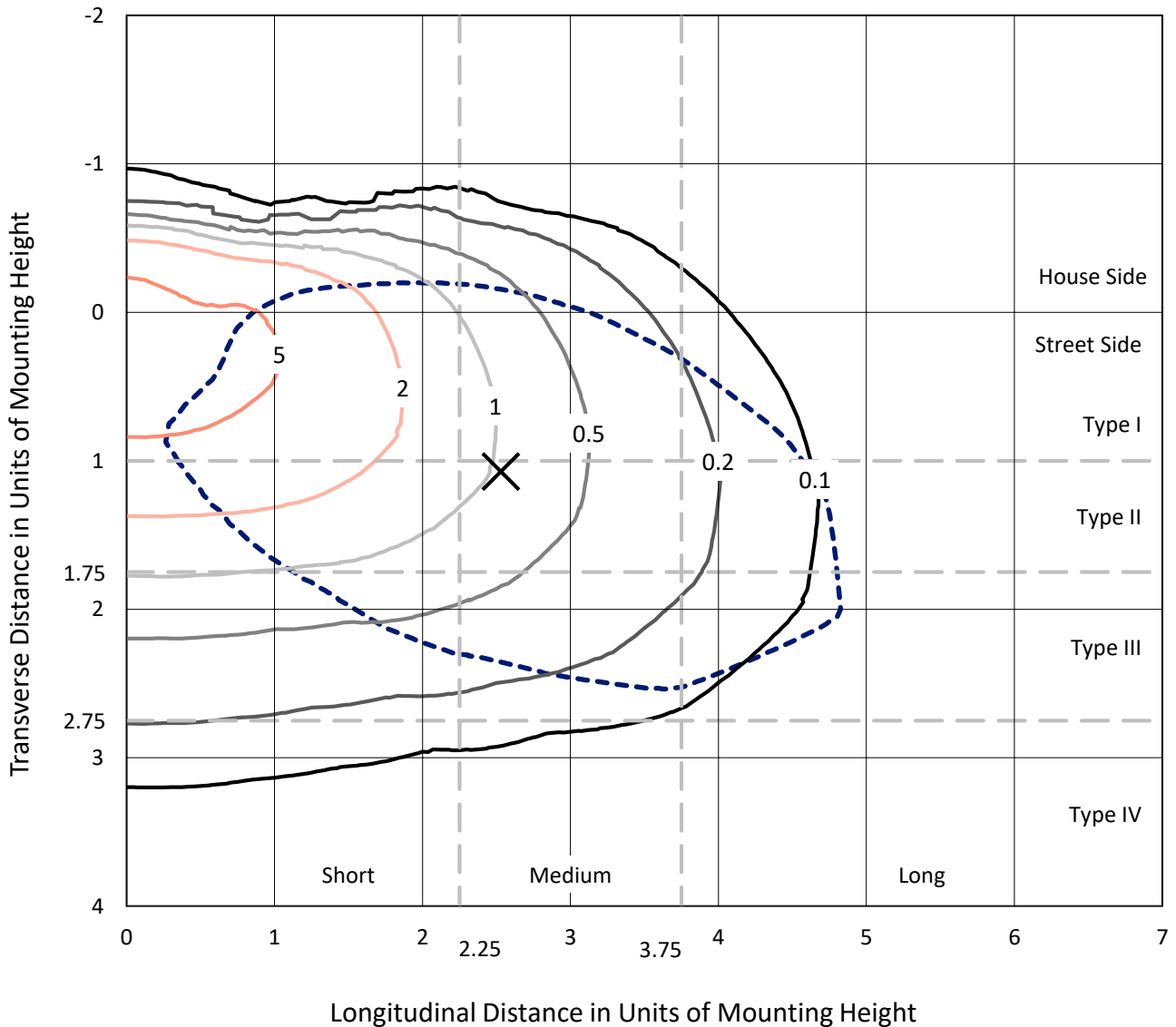
Input Watts (W): 213.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

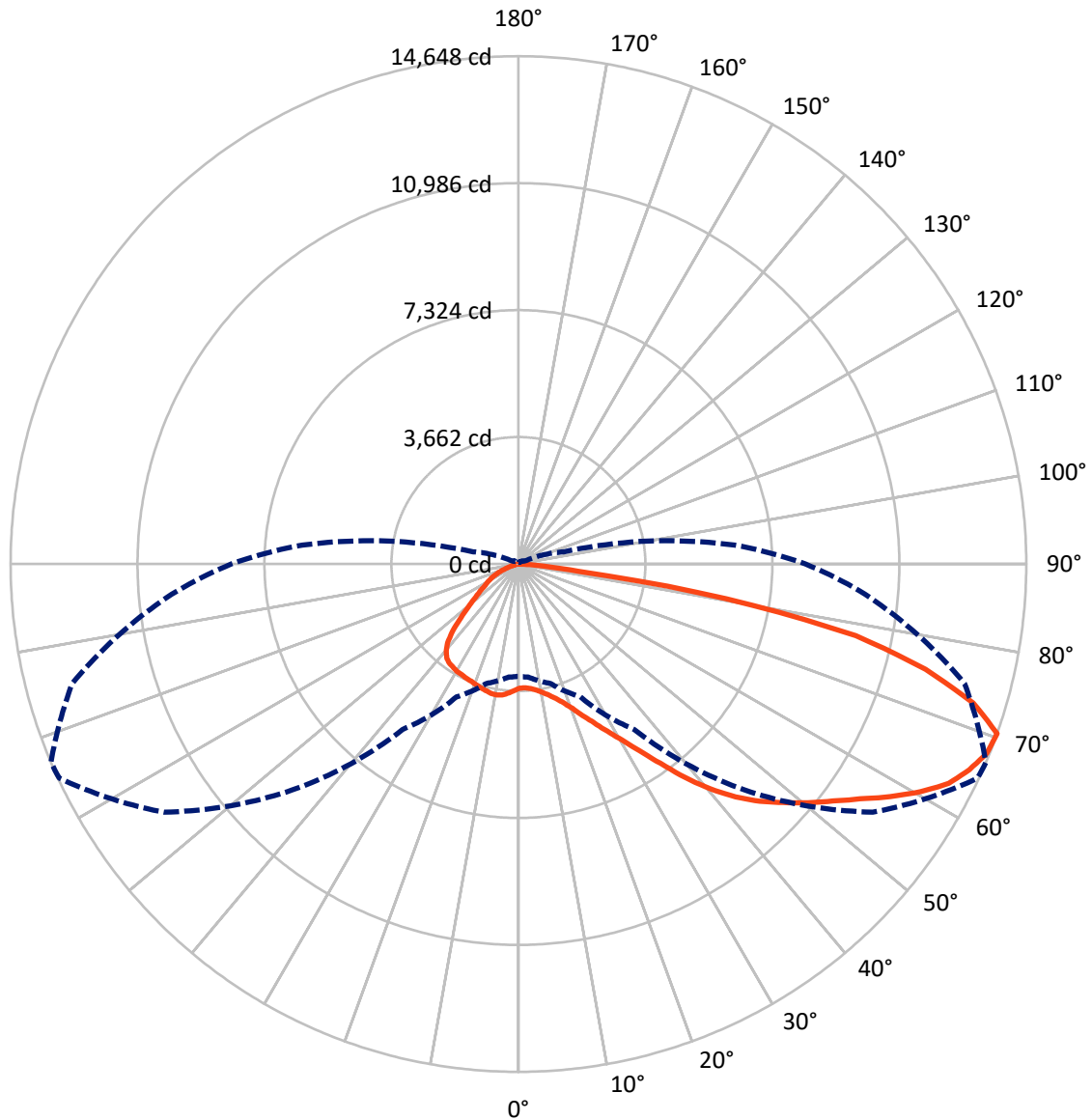
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 6.8 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral      - - - Horizontal Cone Through 70-Deg Vertical

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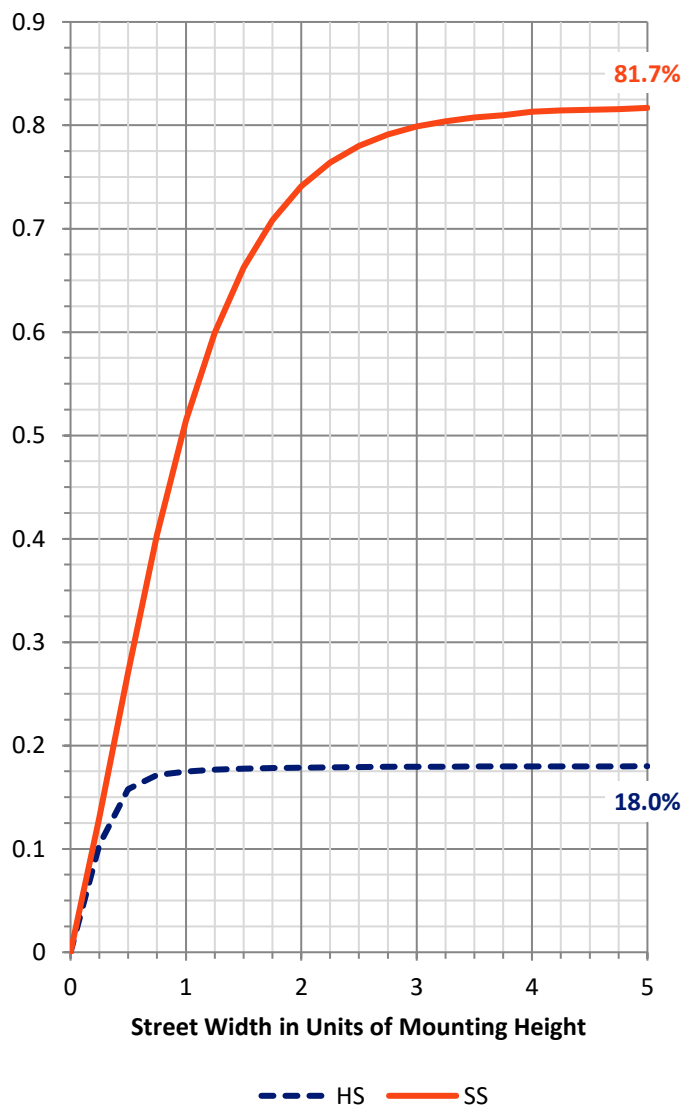
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4339.1	0.0	4339.1
	% Fixture	18.2	0.0	18.2
<b>Street Side</b>	Lumens	19474.9	0.0	19474.9
	% Fixture	81.8	0.0	81.8
<b>Total</b>	Lumens	23814.0	0.0	23814.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	356.9	1.5
10°-20°	1113.4	4.7
20°-30°	1931.9	8.1
30°-40°	2869.2	12.0
40°-50°	3936.4	16.5
50°-60°	4834.1	20.3
60°-70°	5182.7	21.8
70°-80°	3290.0	13.8
80°-90°	299.4	1.3
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°	23814.0	100.0
0°-180°	23814.0	100.0



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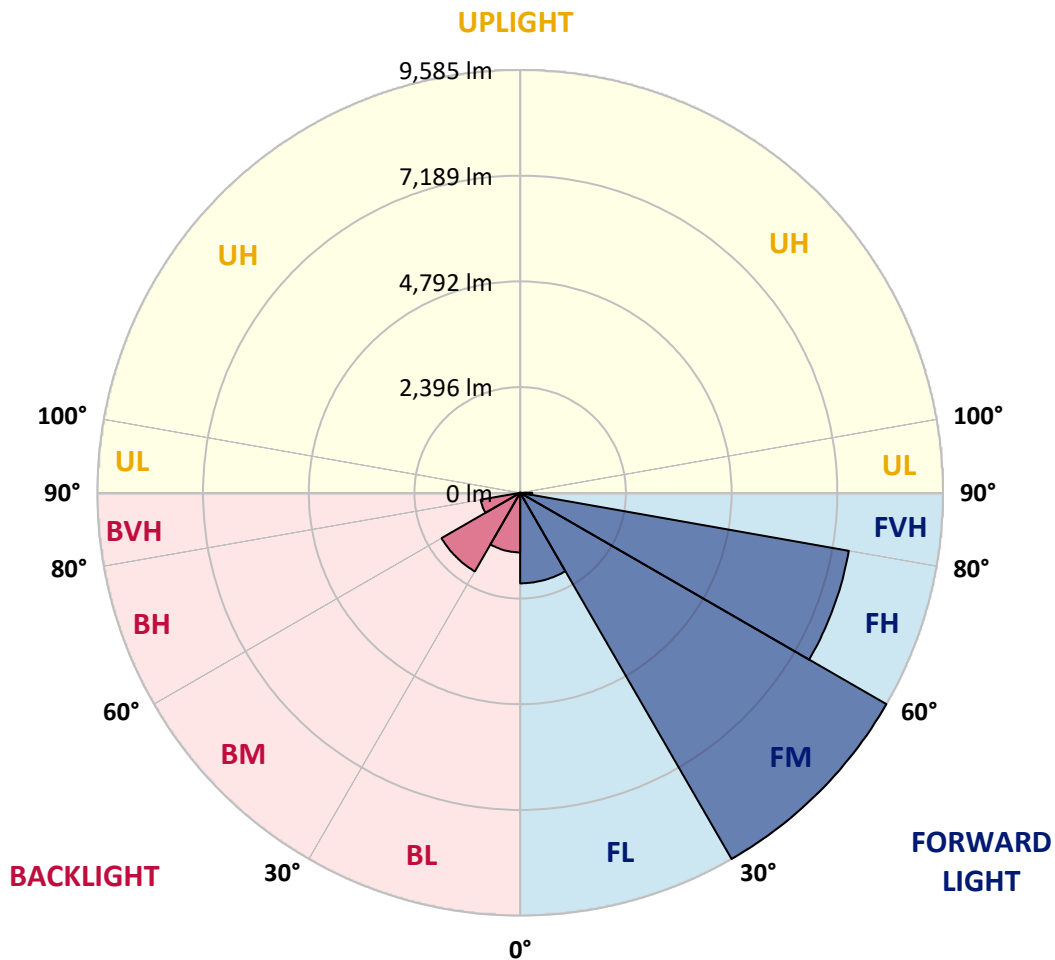
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2051.8	8.6			
FM	(30°-60°)	9584.9	40.2			
FH	(60°-80°)	7565.1	31.8			G4/12000
FVH	(80°-90°)	273.1	1.1			G3/500
BL	(0°-30°)	1350.4	5.7	B3/2500		
BM	(30°-60°)	2054.8	8.6	B2/2500		
BH	(60°-80°)	907.6	3.8	B2/1000		G2/1000
BVH	(80°-90°)	26.3	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-G4**

Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	3582.2	3582.2	3582.2	3582.2	3582.2	3582.2	3582.2	3582.2	3582.2	3582.2	3582.2
2.5°	3549.9	3583.3	3563.7	3561.4	3584.5	3562.6	3577.6	3574.1	3571.8	3575.2	3599.4
5°	3643.2	3682.4	3655.9	3647.8	3660.5	3621.3	3617.9	3609.8	3607.5	3608.7	3643.2
7.5°	3773.4	3819.5	3809.1	3788.4	3781.5	3717.0	3705.4	3676.6	3667.4	3669.7	3704.3
10°	3978.5	4024.6	4003.9	3957.8	3929.0	3855.2	3813.8	3776.9	3758.4	3760.8	3797.6
12.5°	4241.2	4285.0	4250.4	4166.3	4150.2	4031.5	3967.0	3888.6	3876.0	3857.5	3896.7
15°	4488.9	4527.0	4510.8	4432.5	4388.7	4248.1	4129.5	4032.7	4021.1	4003.9	4002.7
17.5°	4763.2	4801.2	4771.2	4713.6	4656.0	4488.9	4361.0	4236.6	4206.6	4191.7	4137.5
20°	5055.8	5115.7	5110.0	5062.7	4993.6	4797.7	4616.8	4476.3	4444.0	4416.3	4302.3
22.5°	5357.7	5436.0	5418.8	5393.4	5364.6	5144.5	4933.7	4771.2	4747.0	4688.3	4508.5
25°	5691.8	5746.0	5733.3	5746.0	5726.4	5531.7	5301.2	5103.1	5070.8	5015.5	4740.1
27.5°	6015.6	6072.0	6093.9	6067.4	6080.1	5940.7	5667.6	5490.2	5459.1	5357.7	5018.9
30°	6308.2	6378.5	6409.6	6421.2	6463.8	6319.8	6118.1	5902.7	5892.3	5788.6	5386.5
32.5°	6542.1	6620.5	6696.5	6746.1	6814.1	6750.7	6550.2	6420.0	6421.2	6327.8	5938.4
35°	6711.5	6801.4	6912.0	7043.3	7186.2	7159.7	7041.0	7043.3	7061.8	7092.9	6642.4
37.5°	6899.3	6971.9	7102.1	7285.3	7503.1	7558.4	7542.2	7725.4	7815.3	7870.6	7261.1
40°	7011.1	7084.8	7247.3	7493.8	7810.7	7943.2	8091.8	8413.3	8530.8	8473.2	7790.0
42.5°	6887.8	6953.5	7235.8	7662.1	8063.0	8363.8	8629.9	9100.0	9185.3	8997.5	8235.9
45°	6727.6	6812.9	7110.2	7708.2	8286.6	8776.2	9189.9	9698.0	9761.4	9495.2	8629.9
47.5°	6596.3	6671.2	7018.0	7658.6	8492.8	9199.1	9681.9	10262.6	10278.7	9950.3	9037.8
50°	6428.1	6519.1	6880.9	7597.5	8617.2	9573.6	10132.4	10789.1	10824.8	10421.6	9383.4
52.5°	6251.8	6340.5	6715.0	7497.3	8707.1	9884.6	10600.2	11349.1	11352.5	10920.5	9752.1
55°	5991.4	6085.9	6500.7	7352.1	8734.8	10090.9	11070.2	11920.6	11956.3	11426.3	10086.3
57.5°	5716.0	5796.7	6242.6	7126.3	8632.2	10285.6	11553.0	12555.4	12653.4	11996.6	10373.2
60°	5350.8	5431.4	5902.7	6830.2	8414.4	10504.5	12106.1	13320.5	13330.8	12458.6	10581.7
62.5°	4957.9	5028.2	5461.4	6365.9	8076.9	10588.6	12580.8	13932.3	13931.1	12870.0	10685.4
65°	4491.2	4520.0	4961.3	5795.5	7552.6	10465.3	12790.5	14335.6	14296.4	13166.1	10650.9
67.5°	3938.2	3969.3	4303.4	5086.9	6792.2	9983.7	12697.1	14530.3	14569.5	13429.9	10501.1
70°	3237.7	3274.5	3566.0	4227.4	5823.2	9215.2	12478.2	14614.4	14647.8	13323.9	10039.0
72.5°	2389.6	2439.2	2617.8	3146.6	4419.8	7742.7	11464.3	13693.8	13712.2	12439.1	9077.0
75°	1484.0	1575.0	1743.3	2091.2	2867.8	5430.3	9799.4	12242.0	12126.8	11095.6	7511.1
77.5°	593.4	608.4	692.5	979.4	1398.8	2827.5	7103.3	9731.4	9951.5	8877.6	5372.7
80°	345.7	343.4	362.9	456.3	600.3	966.7	2763.0	5459.1	6084.7	4876.1	2417.3
82.5°	278.8	268.5	268.5	292.7	288.0	406.7	905.6	1594.6	1749.0	1552.0	687.9
85°	146.3	142.9	116.4	144.0	144.0	202.8	348.0	451.7	477.0	415.9	258.1
87.5°	36.9	36.9	36.9	44.9	35.7	42.6	58.8	71.4	73.7	59.9	38.0
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°	3582.2	3582.2	3582.2	3582.2	3582.2	3582.2	3582.2	3582.2	3582.2	3582.2	3582.2
2.5°	3608.7	3619.0	3659.4	3653.6	3660.5	3660.5	3672.0	3684.7	3722.7	3700.8	3691.6
5°	3650.1	3670.9	3721.6	3740.0	3767.7	3771.1	3794.2	3802.2	3843.7	3820.7	3820.7
7.5°	3729.6	3753.8	3801.1	3808.0	3820.7	3798.8	3804.5	3779.2	3806.8	3779.2	3780.3
10°	3819.5	3835.6	3867.9	3821.8	3802.2	3750.4	3738.9	3676.6	3698.5	3662.8	3653.6
12.5°	3905.9	3900.2	3876.0	3794.2	3740.0	3654.7	3619.0	3534.9	3530.3	3483.1	3473.9
15°	3987.7	3947.4	3869.1	3742.3	3650.1	3531.5	3446.2	3354.0	3321.8	3267.6	3263.0
17.5°	4088.0	4018.8	3879.4	3692.8	3541.8	3369.0	3248.0	3144.3	3077.5	3028.0	3026.8
20°	4210.1	4104.1	3884.0	3636.3	3430.1	3208.9	3039.5	2908.1	2812.5	2750.3	2749.1
22.5°	4363.3	4219.3	3926.7	3571.8	3287.2	3015.3	2804.4	2577.5	2446.1	2319.4	2296.3
25°	4543.1	4335.7	3963.5	3538.4	3146.6	2813.6	2500.3	2168.4	1964.5	1863.1	1825.1
27.5°	4795.4	4529.3	4017.7	3475.0	3014.1	2564.8	2108.5	1746.7	1501.3	1414.9	1414.9
30°	5086.9	4773.5	4119.1	3437.0	2829.8	2215.7	1678.7	1290.5	1062.3	932.1	928.7
32.5°	5531.7	5065.0	4211.3	3355.2	2606.3	1835.4	1214.4	831.9	648.7	568.0	563.4
35°	6171.1	5620.4	4359.9	3273.4	2282.5	1366.5	770.8	477.0	369.9	323.8	321.5
37.5°	6786.4	6149.2	4680.2	3110.9	1822.8	858.4	427.5	275.4	225.8	220.1	217.8
40°	7219.6	6605.5	4906.0	2863.2	1295.1	455.1	247.7	199.3	195.9	193.6	192.4
42.5°	7692.0	6944.3	5066.2	2547.5	768.5	263.9	201.6	179.7	174.0	171.7	171.7
45°	8075.7	7270.3	5096.1	2095.8	387.1	217.8	184.4	163.6	156.7	161.3	162.5
47.5°	8429.4	7578.0	4994.7	1576.2	261.5	202.8	172.8	152.1	147.5	159.0	159.0
50°	8731.3	7838.4	4762.0	1176.4	245.4	191.3	161.3	140.6	139.4	149.8	150.9
52.5°	9032.0	8048.1	4395.6	888.3	232.7	178.6	149.8	130.2	126.7	133.7	134.8
55°	9270.5	8122.9	4123.7	661.4	223.5	167.1	139.4	119.8	111.8	110.6	112.9
57.5°	9401.9	8057.3	3857.5	486.2	213.2	156.7	129.0	106.0	93.3	93.3	93.3
60°	9404.2	7977.8	3572.9	384.8	201.6	145.2	117.5	91.0	78.3	76.0	76.0
62.5°	9378.8	7836.0	3159.3	334.1	189.0	136.0	102.5	77.2	68.0	64.5	64.5
65°	9267.1	7568.7	2658.1	285.7	174.0	129.0	87.6	69.1	61.1	56.5	56.5
67.5°	8919.1	7067.5	2046.3	248.9	160.2	114.1	79.5	62.2	54.2	49.5	48.4
70°	8280.8	6257.5	1350.4	212.0	146.3	101.4	72.6	56.5	48.4	43.8	42.6
72.5°	7210.4	5092.7	678.6	179.7	125.6	93.3	65.7	49.5	41.5	36.9	36.9
75°	5650.3	3534.9	369.9	142.9	99.1	81.8	57.6	41.5	35.7	32.3	32.3
77.5°	3464.6	1752.5	252.3	110.6	74.9	66.8	46.1	34.6	31.1	30.0	30.0
80°	1264.0	573.8	169.4	78.3	56.5	51.8	36.9	30.0	28.8	28.8	28.8
82.5°	456.3	291.5	114.1	53.0	35.7	39.2	30.0	25.3	24.2	25.3	26.5
85°	187.8	127.9	41.5	30.0	19.6	20.7	18.4	17.3	18.4	19.6	19.6
87.5°	28.8	25.3	15.0	15.0	11.5	10.4	8.1	9.2	11.5	13.8	13.8
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)