

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: P510188

Luminaire Tested: **VERD-M-CA4-220-750-U-T2-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510188  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2103-181-3)  
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-T2-HSS  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(4) 70 CRI, 5000K, 1000mA LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 29070 lumens  
Efficiency: N/A  
Efficacy: 130.7 lumens/watt  
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G4

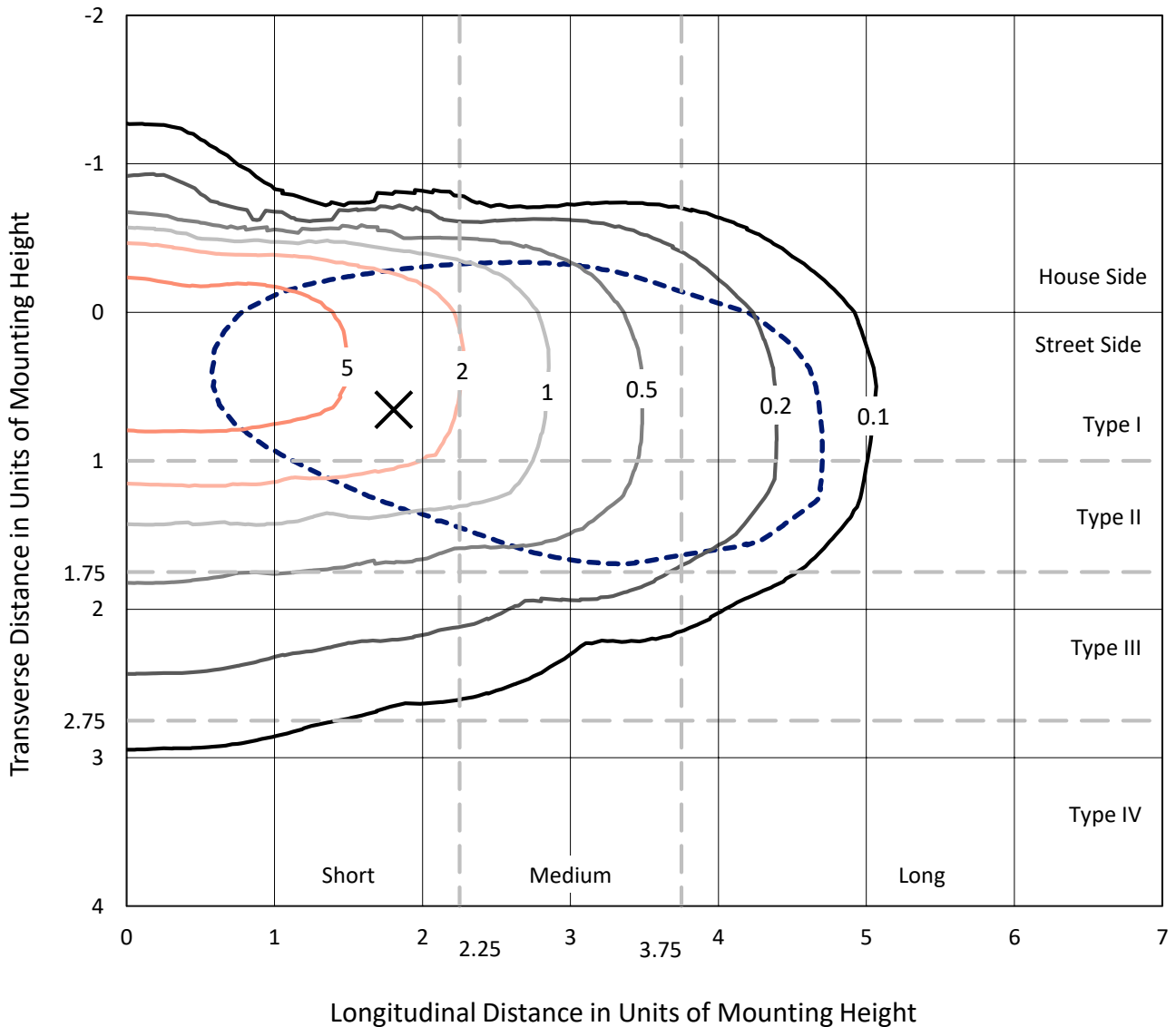
Input Watts (W): 222.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

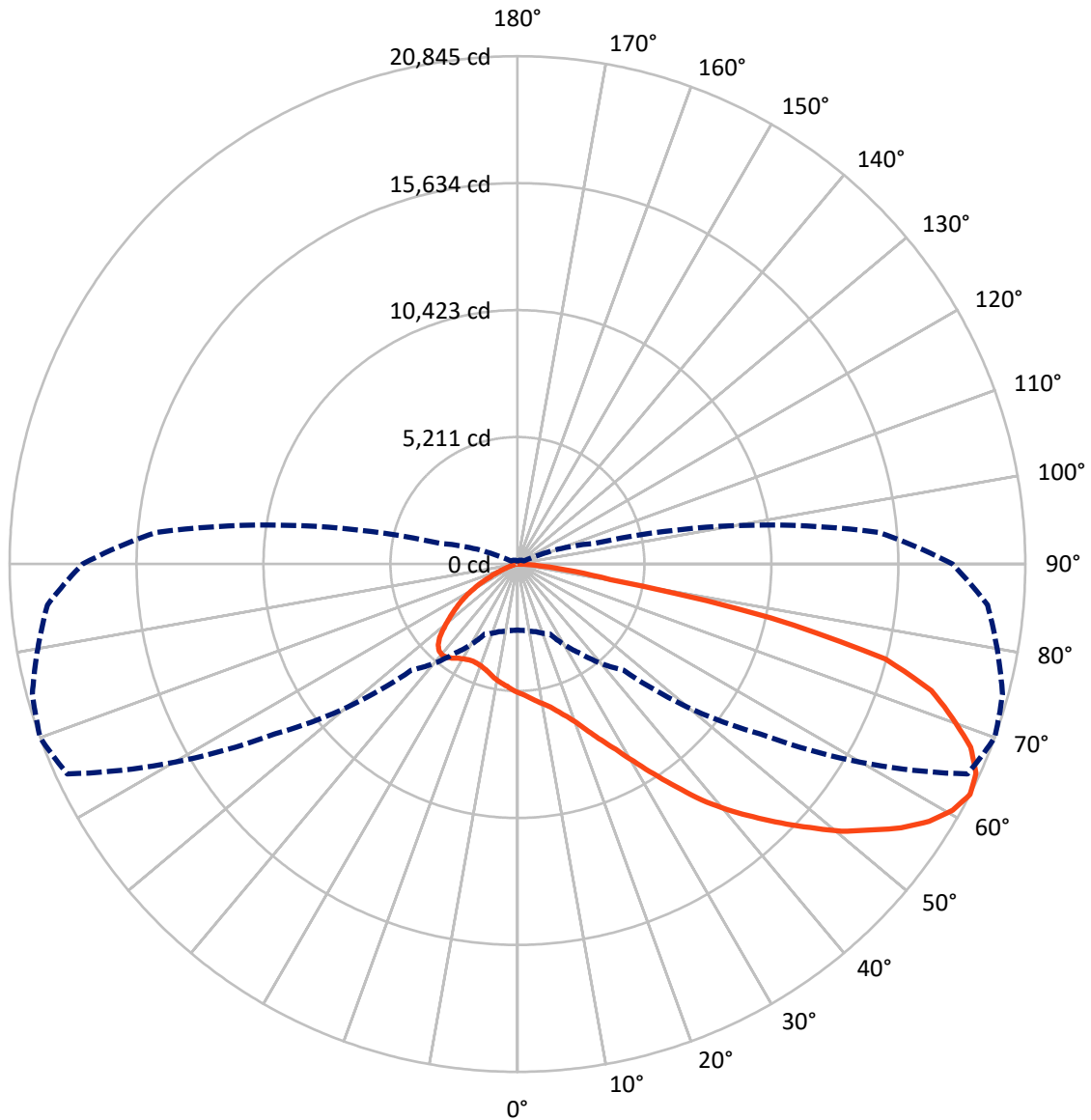
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10 fc  
 Type II - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 70-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

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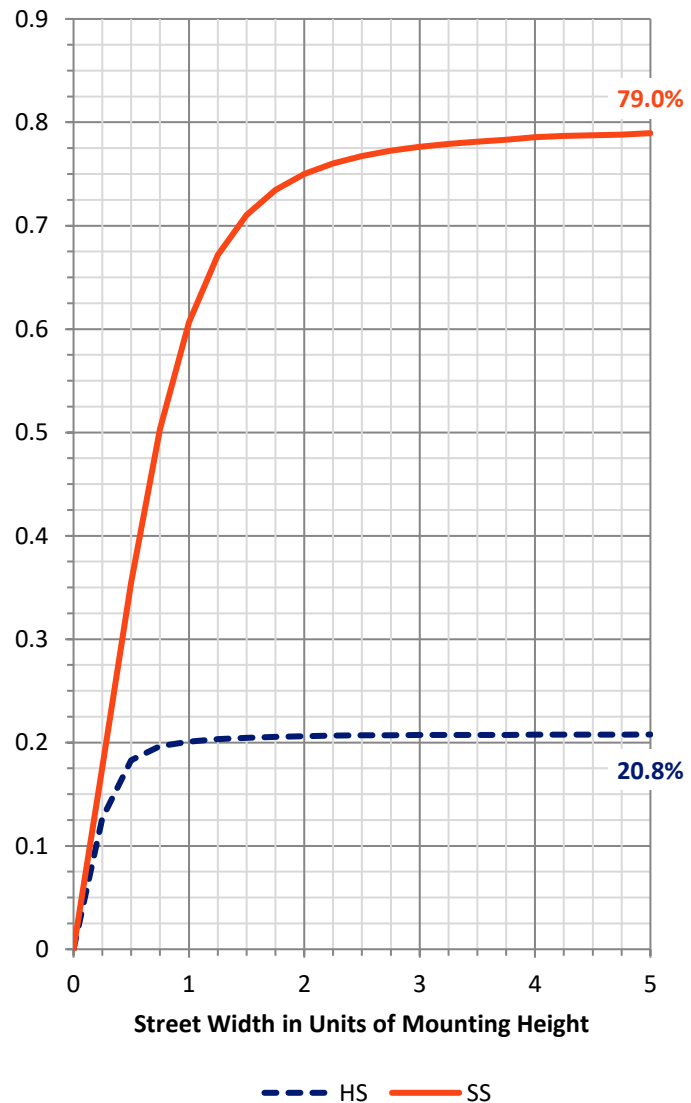
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6113.1	0.0	6113.1
	% Fixture	21.0	0.0	21.0
<b>Street Side</b>	Lumens	22956.9	0.0	22956.9
	% Fixture	79.0	0.0	79.0
<b>Total</b>	Lumens	29070.0	0.0	29070.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	501.8	1.7
10°-20°	1497.4	5.2
20°-30°	2538.5	8.7
30°-40°	3733.1	12.8
40°-50°	4971.3	17.1
50°-60°	5815.4	20.0
60°-70°	5848.8	20.1
70°-80°	3702.4	12.7
80°-90°	461.3	1.6
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°	29070.0	100.0
0°-180°	29070.0	100.0



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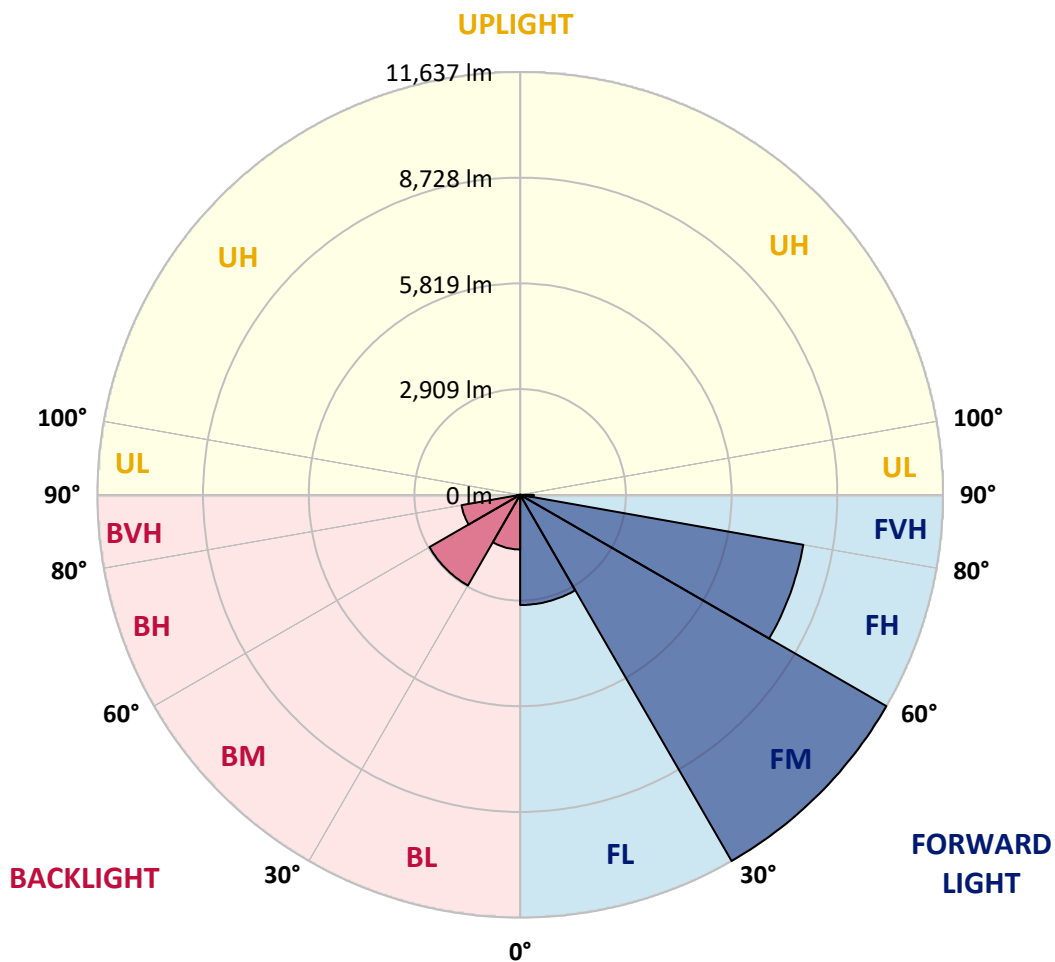
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3032.6	10.4			
FM (30°-60°)	11637.3	40.0			
FH (60°-80°)	7912.9	27.2			G4/12000
FVH (80°-90°)	374.1	1.3			G3/500
BL (0°-30°)	1505.1	5.2	B3/2500		
BM (30°-60°)	2882.4	9.9	B3/5000		
BH (60°-80°)	1638.4	5.6	B3/2500		G3/2500
BVH (80°-90°)	87.2	0.3			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 II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	5284.9	5284.9	5284.9	5284.9	5284.9	5284.9	5284.9	5284.9	5284.9	5284.9	5284.9
2.5°	5574.9	5623.7	5586.4	5572.0	5583.5	5526.1	5480.1	5414.1	5382.5	5359.5	5322.2
5°	5857.7	5938.1	5889.3	5859.1	5854.8	5750.0	5688.3	5597.8	5527.5	5465.8	5371.0
7.5°	6156.3	6203.7	6185.1	6150.6	6127.6	5999.8	5890.7	5763.0	5685.4	5603.6	5444.2
10°	6417.6	6475.1	6456.4	6394.7	6373.1	6242.5	6117.6	5943.9	5837.6	5735.7	5516.0
12.5°	6687.6	6752.2	6713.4	6651.7	6633.0	6500.9	6371.7	6160.6	6028.6	5913.7	5609.3
15°	6935.9	6994.8	6967.5	6897.2	6878.5	6766.5	6624.4	6427.7	6284.1	6131.9	5741.4
17.5°	7134.1	7192.9	7158.5	7125.4	7119.7	7009.2	6924.4	6723.4	6587.1	6380.3	5943.9
20°	7279.1	7339.4	7322.1	7337.9	7398.2	7316.4	7264.7	7095.3	6956.0	6732.1	6235.3
22.5°	7393.9	7471.5	7540.4	7572.0	7683.9	7678.2	7666.7	7566.2	7457.1	7224.5	6582.7
25°	7405.4	7494.4	7630.8	7778.7	7982.6	8080.2	8152.0	8136.2	8008.4	7778.7	7063.7
27.5°	7422.6	7514.5	7655.2	7909.3	8274.0	8502.3	8621.5	8694.7	8620.0	8466.4	7610.7
30°	7385.3	7480.1	7656.7	7981.1	8473.6	8897.1	9109.6	9380.9	9389.6	9260.3	8436.2
32.5°	7215.9	7340.8	7554.7	7989.7	8667.4	9309.2	9636.5	10157.7	10271.1	10174.9	9287.6
35°	6933.1	7046.5	7352.3	7913.7	8785.1	9652.3	10251.0	11063.6	11231.6	11225.8	10289.8
37.5°	6620.1	6734.9	7079.5	7734.2	8861.2	9958.1	10792.3	11962.4	12296.9	12226.5	11235.9
40°	6274.1	6394.7	6792.4	7508.8	8823.9	10230.9	11365.1	12833.8	13248.8	13257.4	12140.4
42.5°	5872.1	5971.1	6370.3	7197.2	8700.4	10431.9	11897.8	13751.3	14187.7	14163.3	12993.2
45°	5487.3	5590.7	5939.5	6714.8	8414.7	10543.9	12420.4	14680.2	15158.3	15080.7	13940.8
47.5°	5022.1	5170.0	5567.7	6310.0	7974.0	10535.3	12876.9	15630.6	16167.6	16104.4	14759.1
50°	3864.9	3952.5	4852.7	5892.2	7376.7	10334.3	13323.4	16563.8	17242.9	17119.4	15632.0
52.5°	3481.6	3560.6	3850.6	5391.1	6834.0	9899.2	13695.3	17632.0	18140.2	18044.0	16523.6
55°	3290.7	3333.7	3510.3	4446.4	6304.2	9192.9	13943.6	18581.0	19109.3	18896.9	17357.8
57.5°	3050.9	3104.0	3309.3	3797.5	5652.4	8108.9	13886.2	19436.7	19924.8	19598.9	18092.9
60°	2867.1	2907.3	3099.7	3418.4	4979.1	6986.2	13299.0	20276.6	20522.1	20200.5	18825.1
62.5°	2712.1	2735.0	2870.0	3172.9	4466.5	6166.4	12153.3	20388.6	20845.1	20612.5	19370.6
65°	2519.7	2525.4	2684.8	2921.7	3992.7	5673.9	11169.8	19814.3	20684.3	20606.8	19567.3
67.5°	2294.3	2305.8	2466.6	2647.5	3422.7	5149.9	9637.9	19505.6	20059.8	20011.0	19178.3
70°	2011.4	2034.4	2182.3	2320.1	2898.7	4521.1	7671.0	18285.2	18942.8	18871.0	17896.2
72.5°	1738.6	1725.7	1863.6	1999.9	2414.9	3774.5	5814.6	16184.8	17768.4	17699.5	16230.7
75°	1428.5	1419.9	1562.1	1691.3	1979.8	3049.5	4090.3	11969.5	15611.9	15824.4	13995.3
77.5°	880.1	887.3	969.1	1055.2	1341.0	2278.5	2610.1	6658.8	10605.6	12576.8	10983.2
80°	637.5	637.5	697.8	749.4	887.3	1388.3	1299.3	2776.7	3876.4	6070.2	6849.8
82.5°	413.5	396.3	433.6	478.1	493.9	601.6	594.4	1392.6	1975.5	2377.5	2852.8
85°	215.4	238.3	143.6	202.4	213.9	199.6	205.3	653.2	877.2	1124.2	1237.6
87.5°	33.0	25.8	34.5	47.4	54.6	45.9	40.2	76.1	117.7	156.5	185.2
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°	5284.9	5284.9	5284.9	5284.9	5284.9	5284.9	5284.9	5284.9	5284.9	5284.9	5284.9
2.5°	5297.8	5290.6	5224.6	5128.4	5049.4	4983.4	4940.3	4911.6	4943.2	4885.7	4878.6
5°	5312.1	5263.3	5119.8	4981.9	4875.7	4733.5	4637.4	4572.7	4598.6	4548.3	4528.2
7.5°	5350.9	5261.9	5063.8	4844.1	4643.1	4490.9	4343.0	4200.9	4179.4	4147.8	4149.2
10°	5385.4	5257.6	4999.2	4712.0	4478.0	4209.5	4031.5	3885.0	3852.0	3814.7	3796.0
12.5°	5439.9	5267.6	4918.8	4571.3	4258.3	3948.2	3755.8	3583.5	3550.5	3477.3	3461.5
15°	5549.0	5303.5	4839.8	4397.6	4011.4	3698.4	3450.0	3299.3	3239.0	3157.1	3155.7
17.5°	5691.2	5408.3	4799.6	4233.9	3801.8	3451.5	3188.7	3036.5	2934.6	2885.8	2872.9
20°	5893.6	5544.7	4798.2	4086.0	3583.5	3187.3	2885.8	2713.5	2627.4	2587.2	2562.7
22.5°	6205.2	5745.7	4824.0	3982.7	3363.9	2931.7	2631.7	2394.8	2252.6	2142.1	2157.9
25°	6592.8	6047.2	4882.9	3887.9	3172.9	2687.7	2311.5	1982.7	1728.6	1618.0	1626.7
27.5°	7085.2	6407.6	5035.0	3791.7	2956.1	2424.9	1893.7	1475.9	1283.5	1154.3	1164.4
30°	7715.5	6855.5	5234.6	3717.1	2755.1	2057.4	1425.7	1088.3	918.9	812.6	802.6
32.5°	8469.3	7504.5	5452.8	3666.8	2535.5	1597.9	1028.0	798.3	633.1	572.8	581.5
35°	9402.5	8233.8	5785.9	3593.6	2159.3	1137.1	733.6	539.8	455.1	443.6	445.1
37.5°	10253.9	8980.4	6116.1	3470.1	1704.2	808.3	498.2	410.6	391.9	387.6	393.4
40°	11088.0	9660.9	6414.8	3290.7	1171.5	554.2	366.1	370.4	354.6	343.1	337.4
42.5°	11869.0	10317.0	6648.8	2960.4	801.1	366.1	324.5	337.4	334.5	311.5	301.5
45°	12711.8	11010.5	6778.0	2498.1	503.9	311.5	291.4	314.4	328.8	302.9	291.4
47.5°	13431.1	11686.7	6772.3	1913.8	341.7	294.3	274.2	294.3	311.5	292.9	282.8
50°	14260.9	12246.6	6588.5	1214.6	302.9	272.8	262.7	269.9	292.9	280.0	269.9
52.5°	15182.7	13013.3	6310.0	677.7	287.1	258.4	244.1	252.7	272.8	257.0	262.7
55°	15946.5	13649.3	5655.3	462.3	280.0	241.2	232.6	238.3	246.9	231.1	239.8
57.5°	16628.4	14174.8	4993.4	379.0	269.9	229.7	228.3	216.8	215.4	205.3	196.7
60°	17319.0	14589.7	4100.4	343.1	259.9	231.1	206.7	190.9	178.0	168.0	163.7
62.5°	17848.8	14876.9	3243.3	310.1	245.5	216.8	189.5	163.7	142.1	129.2	129.2
65°	18003.8	14749.1	2282.8	281.4	229.7	203.9	169.4	133.5	107.7	99.1	94.8
67.5°	17507.1	14015.4	1589.3	259.9	213.9	189.5	149.3	109.1	86.1	74.7	71.8
70°	16242.2	12787.9	937.5	229.7	193.8	165.1	136.4	89.0	70.3	58.9	56.0
72.5°	14372.9	10947.3	584.3	195.3	166.5	135.0	101.9	73.2	56.0	45.9	44.5
75°	11871.9	8533.9	381.9	150.7	132.1	106.2	77.5	58.9	48.8	38.8	35.9
77.5°	9520.2	6037.2	341.7	114.9	97.6	76.1	58.9	48.8	40.2	34.5	34.5
80°	5478.7	3445.7	280.0	79.0	60.3	57.4	45.9	40.2	37.3	33.0	31.6
82.5°	2692.0	1655.4	180.9	48.8	34.5	37.3	38.8	35.9	31.6	28.7	28.7
85°	927.5	551.3	73.2	31.6	23.0	23.0	24.4	25.8	24.4	23.0	23.0
87.5°	143.6	104.8	20.1	18.7	14.4	12.9	14.4	15.8	15.8	14.4	14.4
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)