

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: P510148

Luminaire Tested: **VERD-M-CA4-210-760-U-T2-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510148  
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-CA4-210-760-U-T2-HSS  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(4) 70 CRI, 5700K, 960mA LEDS AND TYPE II OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 27461 lumens  
Efficiency: N/A  
Efficacy: 128.6 lumens/watt  
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B3 - U0 - G3

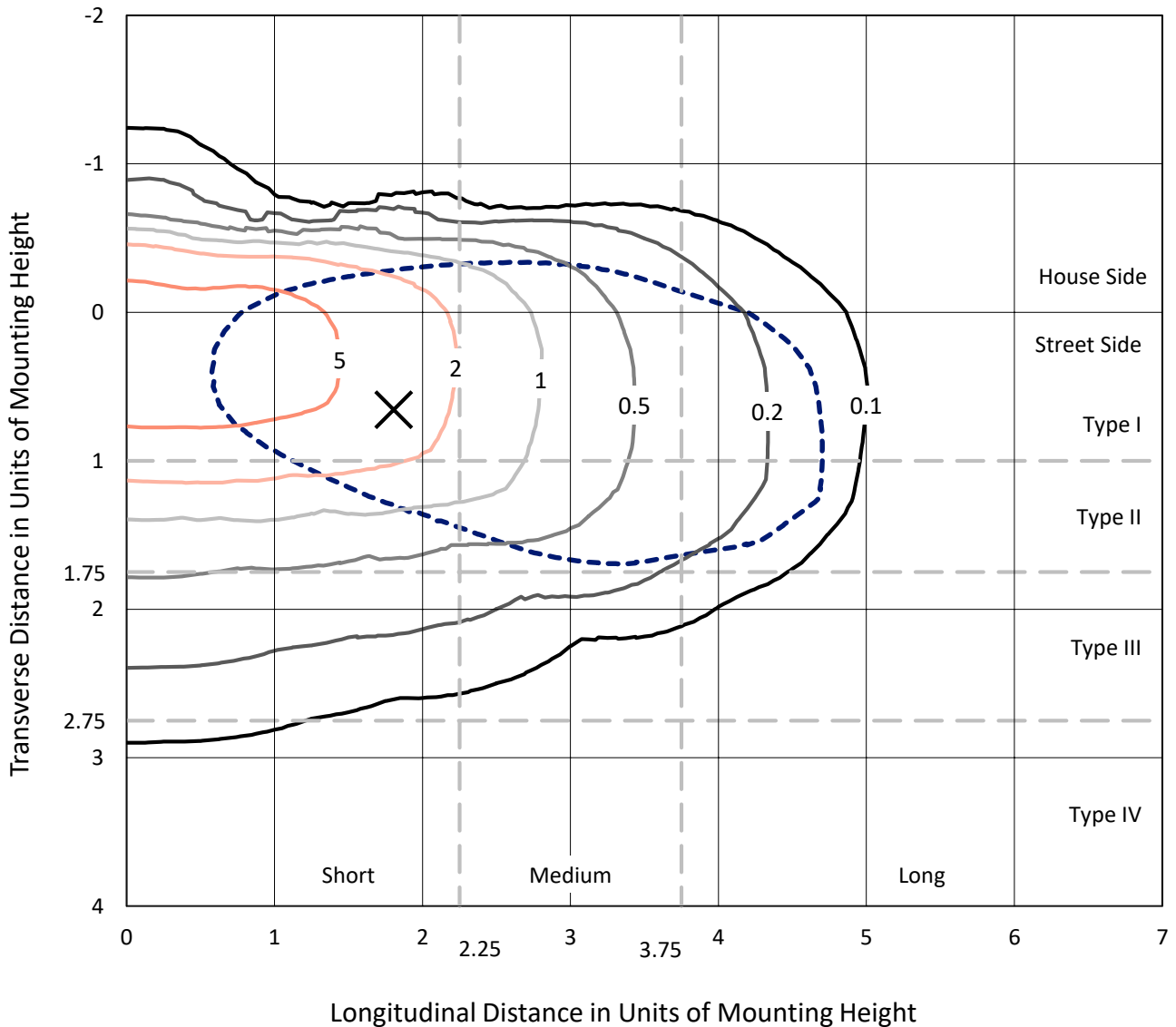
Input Watts (W): 213.6  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

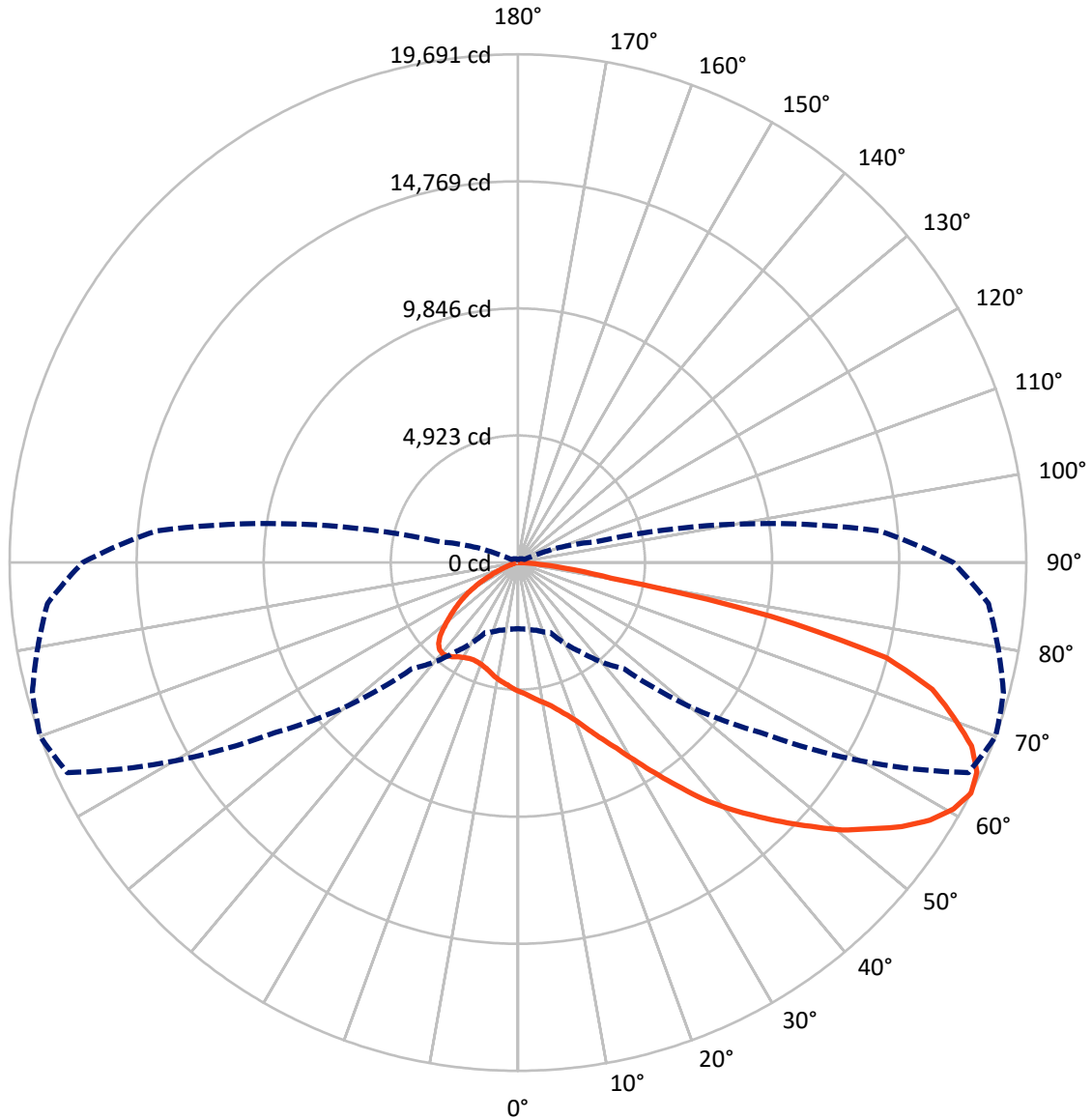
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.4 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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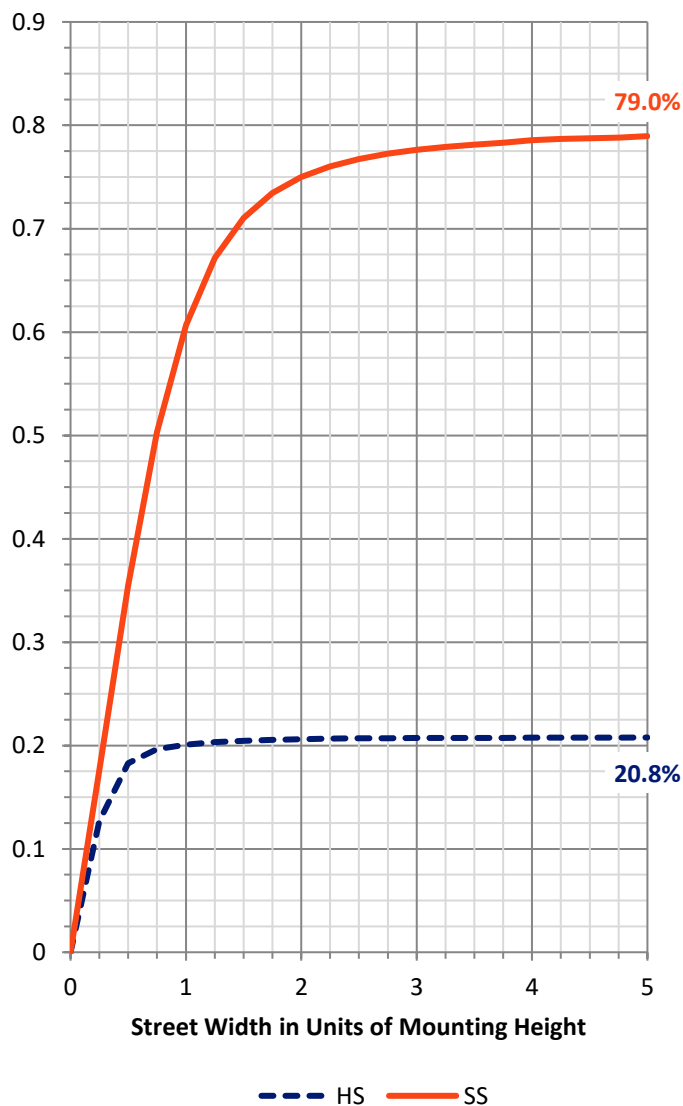
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5774.8	0.0	5774.8
	% Fixture	21.0	0.0	21.0
<b>Street Side</b>	Lumens	21686.2	0.0	21686.2
	% Fixture	79.0	0.0	79.0
<b>Total</b>	Lumens	27461.0	0.0	27461.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	474.0	1.7
10°-20°	1414.5	5.2
20°-30°	2398.0	8.7
30°-40°	3526.4	12.8
40°-50°	4696.1	17.1
50°-60°	5493.5	20.0
60°-70°	5525.1	20.1
70°-80°	3497.5	12.7
80°-90°	435.8	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°	27461.0	100.0
0°-180°	27461.0	100.0



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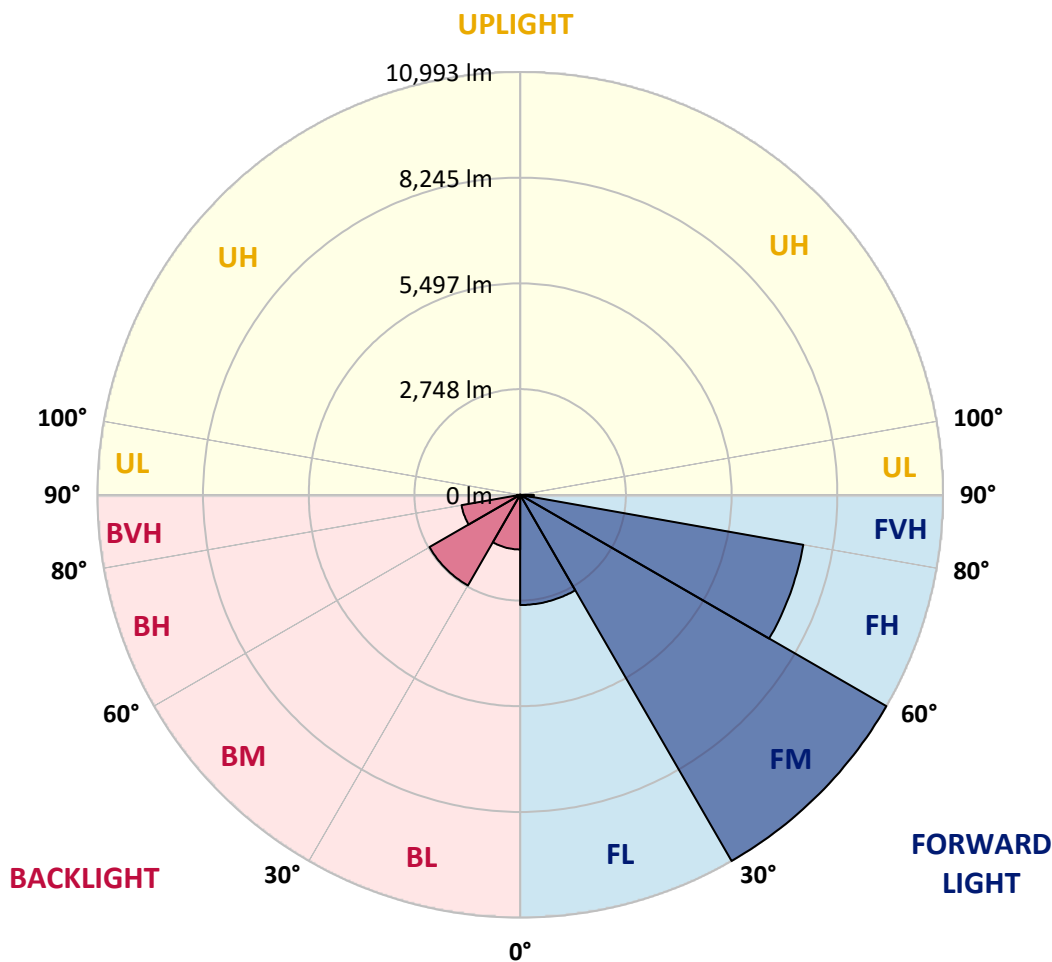
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2864.8	10.4			
FM (30°-60°)	10993.1	40.0			
FH (60°-80°)	7474.9	27.2			G3/7500
FVH (80°-90°)	353.4	1.3			G3/500
BL (0°-30°)	1421.8	5.2	B3/2500		
BM (30°-60°)	2722.9	9.9	B3/5000		
BH (60°-80°)	1547.7	5.6	B3/2500		G3/2500
BVH (80°-90°)	82.4	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-G3**

Type II Short





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	70°	75°	85°
0°	4992.3	4992.3	4992.3	4992.3	4992.3	4992.3	4992.3	4992.3	4992.3	4992.3	4992.3
2.5°	5266.3	5312.4	5277.2	5263.6	5274.4	5220.2	5176.8	5114.4	5084.6	5062.9	5027.6
5°	5533.5	5609.4	5563.3	5534.8	5530.8	5431.8	5373.5	5288.0	5221.6	5163.2	5073.7
7.5°	5815.6	5860.3	5842.7	5810.2	5788.5	5667.8	5564.7	5444.0	5370.7	5293.4	5142.9
10°	6062.4	6116.7	6099.0	6040.7	6020.4	5897.0	5779.0	5614.9	5514.5	5418.2	5210.7
12.5°	6317.4	6378.4	6341.8	6283.5	6265.9	6141.1	6019.0	5819.7	5694.9	5586.4	5298.9
15°	6552.0	6607.6	6581.9	6515.4	6497.8	6392.0	6257.7	6071.9	5936.3	5792.5	5423.6
17.5°	6739.2	6794.8	6762.3	6731.1	6725.6	6621.2	6541.2	6351.3	6222.5	6027.2	5614.9
20°	6876.2	6933.1	6916.9	6931.8	6988.7	6911.4	6862.6	6702.6	6571.0	6359.4	5890.2
22.5°	6984.7	7057.9	7123.0	7152.8	7258.6	7253.2	7242.4	7147.4	7044.3	6824.6	6218.4
25°	6995.5	7079.6	7208.5	7348.1	7540.7	7633.0	7700.8	7685.9	7565.1	7348.1	6672.7
27.5°	7011.8	7098.6	7231.5	7471.6	7816.1	8031.7	8144.3	8213.4	8142.9	7997.8	7189.5
30°	6976.5	7066.0	7232.9	7539.4	8004.6	8404.7	8605.4	8861.7	8869.9	8747.8	7969.3
32.5°	6816.5	6934.5	7136.6	7547.5	8187.7	8793.9	9103.1	9595.5	9702.6	9611.7	8773.6
35°	6549.3	6656.5	6945.3	7475.6	8298.9	9118.1	9683.6	10451.2	10609.9	10604.5	9720.2
37.5°	6253.7	6362.2	6687.7	7306.1	8370.8	9406.9	10194.9	11300.3	11616.3	11549.8	10614.0
40°	5926.8	6040.7	6416.4	7093.2	8335.5	9664.6	10736.1	12123.5	12515.5	12523.6	11468.4
42.5°	5547.1	5640.6	6017.7	6798.9	8218.9	9854.5	11239.2	12990.1	13402.4	13379.4	12274.0
45°	5183.6	5281.2	5610.8	6343.2	7949.0	9960.3	11732.9	13867.6	14319.3	14246.0	13169.2
47.5°	4744.2	4883.8	5259.5	5960.7	7532.6	9952.1	12164.2	14765.5	15272.7	15213.0	13942.2
50°	3651.0	3733.7	4584.1	5566.0	6968.4	9762.3	12586.0	15647.0	16288.5	16171.9	14766.8
52.5°	3288.9	3363.5	3637.5	5092.7	6455.7	9351.3	12937.2	16656.1	17136.2	17045.3	15609.1
55°	3108.5	3149.2	3316.0	4200.3	5955.3	8684.1	13171.9	17552.6	18051.7	17850.9	16397.0
57.5°	2882.0	2932.2	3126.2	3587.3	5339.5	7660.1	13117.6	18360.9	18822.0	18514.1	17091.4
60°	2708.4	2746.4	2928.1	3229.2	4703.5	6599.5	12562.9	19154.3	19386.2	19082.4	17783.1
62.5°	2562.0	2583.7	2711.1	2997.3	4219.3	5825.1	11480.6	19260.1	19691.4	19471.6	18298.5
65°	2380.2	2385.6	2536.2	2760.0	3771.7	5359.9	10551.6	18717.6	19539.5	19466.2	18484.3
67.5°	2167.3	2178.1	2330.0	2500.9	3233.3	4864.9	9104.5	18426.0	18949.5	18903.4	18116.8
70°	1900.1	1921.8	2061.5	2191.7	2738.3	4270.8	7246.4	17273.2	17894.3	17826.5	16905.6
72.5°	1642.4	1630.2	1760.4	1889.3	2281.2	3565.6	5492.8	15289.0	16784.9	16719.8	15332.4
75°	1349.5	1341.3	1475.6	1597.7	1870.3	2880.7	3863.9	11307.0	14747.8	14948.6	13220.7
77.5°	831.4	838.2	915.5	996.8	1266.7	2152.4	2465.7	6290.3	10018.6	11880.7	10375.3
80°	602.2	602.2	659.1	708.0	838.2	1311.5	1227.4	2623.0	3661.9	5734.2	6470.7
82.5°	390.6	374.3	409.6	451.6	466.5	568.3	561.5	1315.6	1866.2	2245.9	2694.9
85°	203.4	225.1	135.6	191.2	202.1	188.5	193.9	617.1	828.7	1061.9	1169.1
87.5°	31.2	24.4	32.5	44.8	51.5	43.4	38.0	71.9	111.2	147.8	175.0
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°	4992.3	4992.3	4992.3	4992.3	4992.3	4992.3	4992.3	4992.3	4992.3	4992.3	4992.3
2.5°	5004.6	4997.8	4935.4	4844.5	4769.9	4707.5	4666.8	4639.7	4669.6	4615.3	4608.5
5°	5018.1	4972.0	4836.4	4706.2	4605.8	4471.5	4380.7	4319.6	4344.1	4296.6	4277.6
7.5°	5054.7	4970.6	4783.5	4576.0	4386.1	4242.3	4102.6	3968.4	3948.0	3918.2	3919.6
10°	5087.3	4966.6	4722.5	4451.2	4230.1	3976.5	3808.3	3670.0	3638.8	3603.5	3585.9
12.5°	5138.8	4976.1	4646.5	4318.3	4022.6	3729.7	3547.9	3385.2	3354.0	3284.8	3269.9
15°	5241.9	5010.0	4571.9	4154.2	3789.4	3493.7	3259.1	3116.7	3059.7	2982.4	2981.0
17.5°	5376.2	5109.0	4533.9	3999.6	3591.3	3260.4	3012.2	2868.5	2772.2	2726.1	2713.9
20°	5567.4	5237.8	4532.6	3859.9	3385.2	3010.9	2726.1	2563.3	2481.9	2444.0	2420.9
22.5°	5861.7	5427.7	4557.0	3762.2	3177.7	2769.5	2486.0	2262.2	2128.0	2023.5	2038.4
25°	6227.9	5712.5	4612.6	3672.7	2997.3	2538.9	2183.6	1873.0	1632.9	1528.5	1536.6
27.5°	6693.1	6052.9	4756.4	3581.8	2792.5	2290.7	1788.9	1394.2	1212.5	1090.4	1099.9
30°	7288.5	6476.1	4944.9	3511.3	2602.6	1943.5	1346.8	1028.0	868.0	767.6	758.1
32.5°	8000.5	7089.1	5151.0	3463.9	2395.1	1509.5	971.1	754.1	598.1	541.1	549.3
35°	8882.1	7778.1	5465.7	3394.7	2039.8	1074.1	693.0	509.9	429.9	419.1	420.4
37.5°	9686.3	8483.3	5777.6	3278.1	1609.9	763.6	470.6	387.9	370.3	366.2	371.6
40°	10474.3	9126.2	6059.7	3108.5	1106.7	523.5	345.8	349.9	335.0	324.1	318.7
42.5°	11212.1	9746.0	6280.8	2796.6	756.8	345.8	306.5	318.7	316.0	294.3	284.8
45°	12008.2	10401.1	6402.8	2359.9	476.0	294.3	275.3	297.0	310.6	286.2	275.3
47.5°	12687.7	11039.9	6397.4	1807.9	322.8	278.0	259.0	278.0	294.3	276.7	267.2
50°	13471.6	11568.8	6223.8	1147.4	286.2	257.7	248.2	255.0	276.7	264.5	255.0
52.5°	14342.3	12293.0	5960.7	640.1	271.2	244.1	230.6	238.7	257.7	242.8	248.2
55°	15063.8	12893.8	5342.3	436.7	264.5	227.8	219.7	225.1	233.3	218.4	226.5
57.5°	15708.1	13390.2	4717.0	358.0	255.0	217.0	215.6	204.8	203.4	193.9	185.8
60°	16360.4	13782.2	3873.4	324.1	245.5	218.4	195.3	180.4	168.2	158.7	154.6
62.5°	16860.9	14053.4	3063.8	292.9	231.9	204.8	179.0	154.6	134.3	122.1	122.1
65°	17007.3	13932.7	2156.4	265.8	217.0	192.6	160.0	126.1	101.7	93.6	89.5
67.5°	16538.1	13239.7	1501.4	245.5	202.1	179.0	141.0	103.1	81.4	70.5	67.8
70°	15343.2	12080.1	885.6	217.0	183.1	156.0	128.8	84.1	66.5	55.6	52.9
72.5°	13577.4	10341.4	552.0	184.4	157.3	127.5	96.3	69.2	52.9	43.4	42.0
75°	11214.8	8061.5	360.8	142.4	124.8	100.4	73.2	55.6	46.1	36.6	33.9
77.5°	8993.3	5703.0	322.8	108.5	92.2	71.9	55.6	46.1	38.0	32.5	32.5
80°	5175.4	3255.0	264.5	74.6	57.0	54.2	43.4	38.0	35.3	31.2	29.8
82.5°	2543.0	1563.8	170.9	46.1	32.5	35.3	36.6	33.9	29.8	27.1	27.1
85°	876.1	520.8	69.2	29.8	21.7	21.7	23.1	24.4	23.1	21.7	21.7
87.5°	135.6	99.0	19.0	17.6	13.6	12.2	13.6	14.9	14.9	13.6	13.6
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)