

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: P510182

Luminaire Tested: **VERD-M-CA4-220-740-U-T3-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510182  
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-CA4-220-740-U-T3-HSS  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(4) 70 CRI, 4000K, 1000mA LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

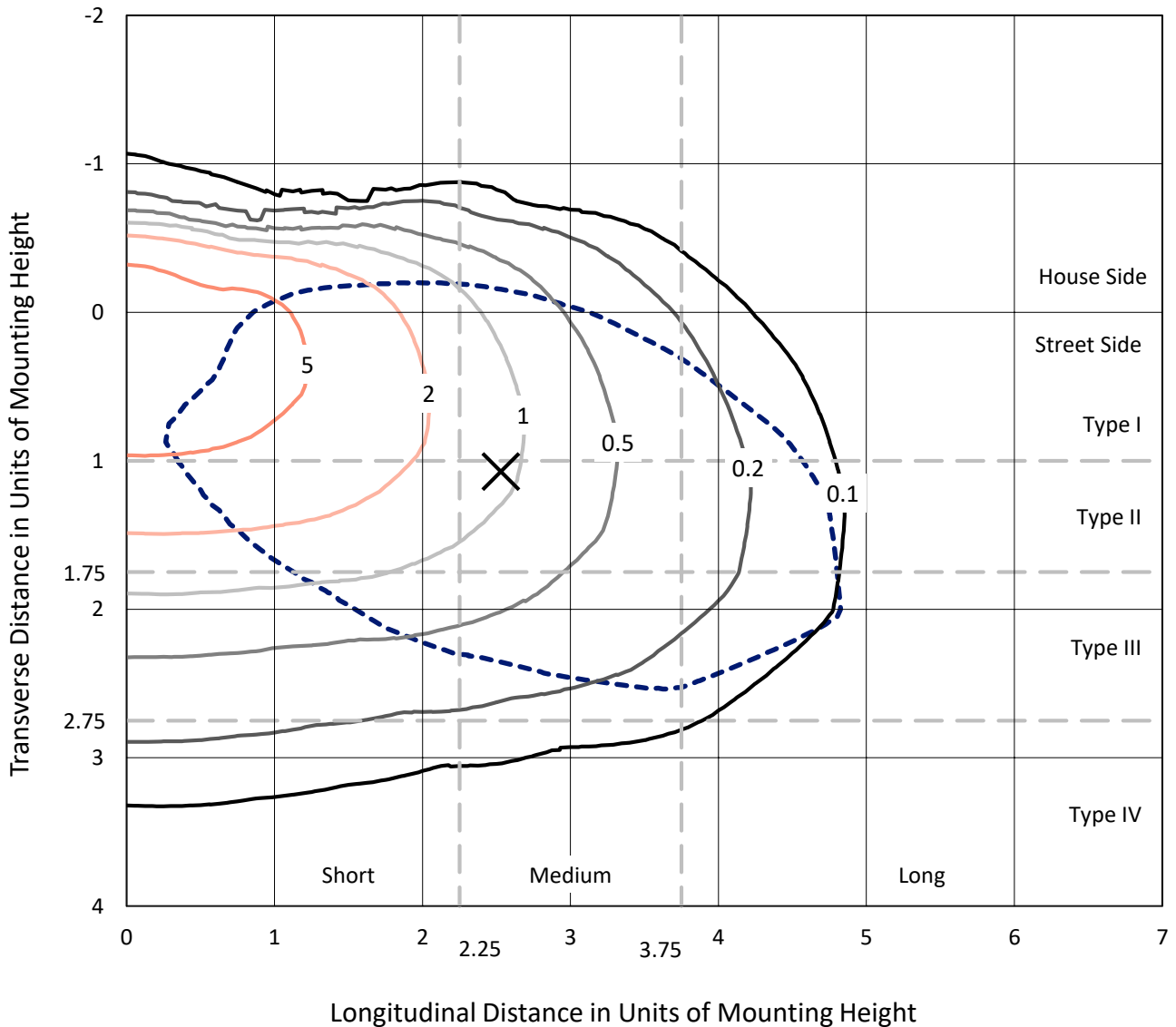
Lumens per Lamp: N/A  
Luminaire Lumens: 29138 lumens  
Efficiency: N/A  
Efficacy: 131.0 lumens/watt  
Luminous Opening: Rectangular (W 1.35' x L: 1.58' x H: 0')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G4  
  
Input Watts (W): 222.5  
Input Voltage (V): NR  
Input Current (Ain): 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

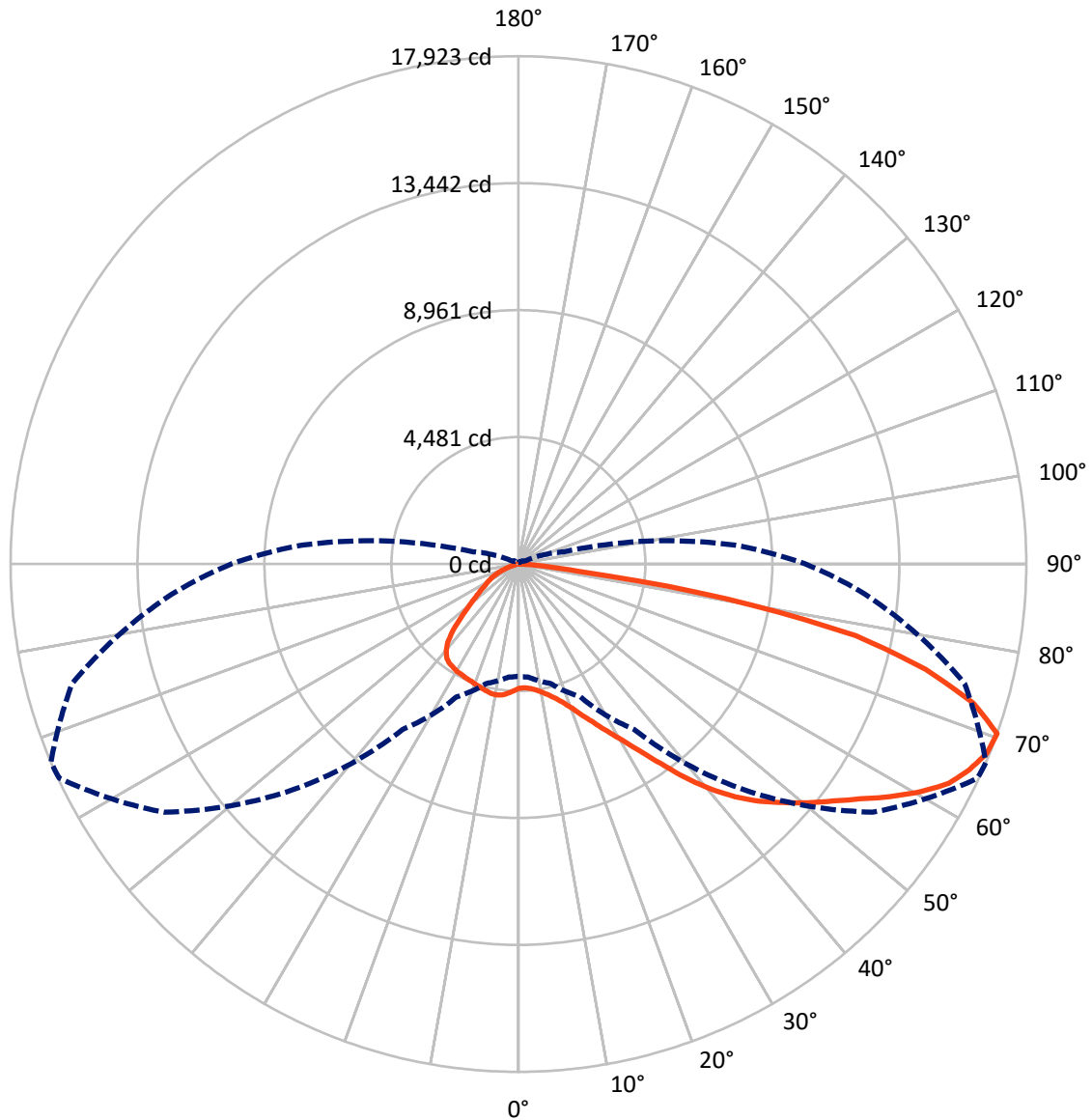
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8.3 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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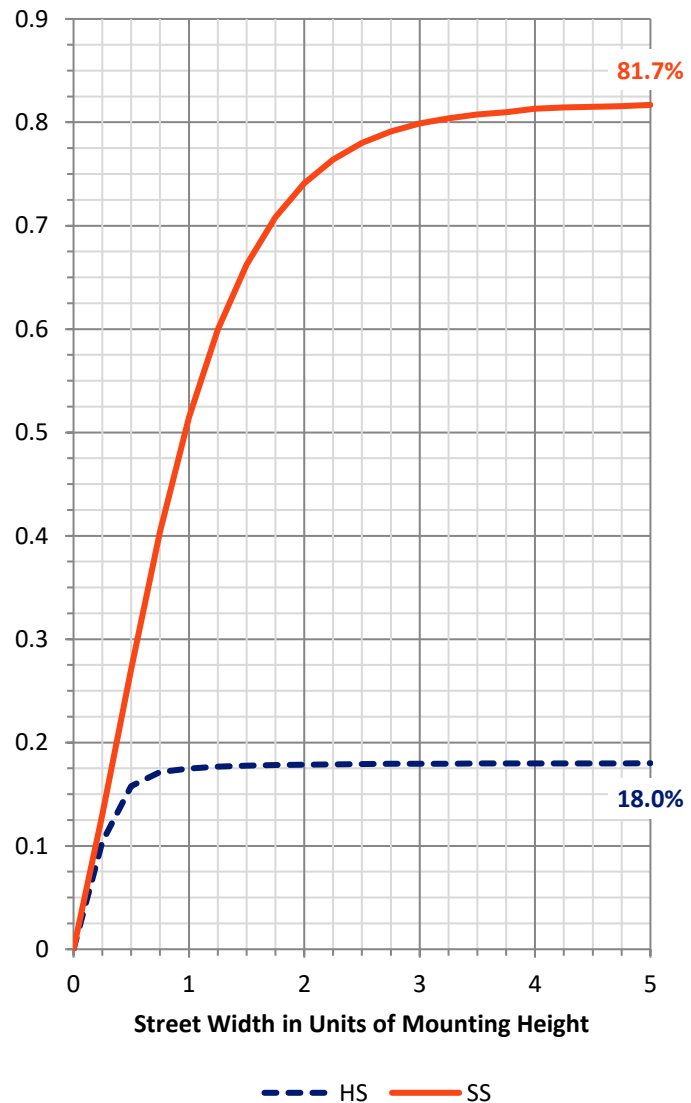
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	5309.2	0.0	5309.2
	% Fixture	18.2	0.0	18.2
<b>Street Side</b>	Lumens	23828.8	0.0	23828.8
	% Fixture	81.8	0.0	81.8
<b>Total</b>	Lumens	29138.0	0.0	29138.0
	% Fixture	100.0	0.0	100.0

**Coefficient of Utilization**

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	436.7	1.5
10°-20°	1362.4	4.7
20°-30°	2363.7	8.1
30°-40°	3510.7	12.0
40°-50°	4816.4	16.5
50°-60°	5914.8	20.3
60°-70°	6341.3	21.8
70°-80°	4025.6	13.8
80°-90°	366.3	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°	29138.0	100.0
0°-180°	29138.0	100.0



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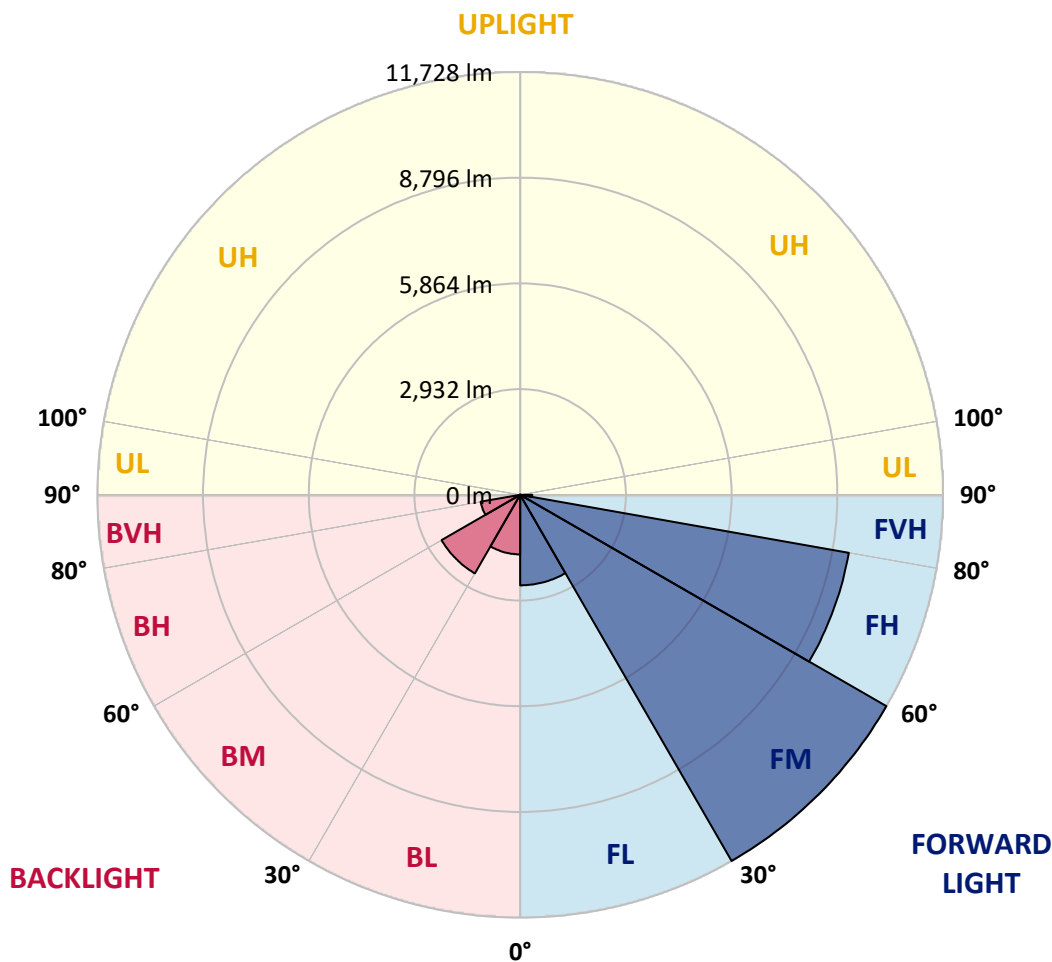
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2510.5	8.6			
FM (30°-60°)	11727.8	40.2			
FH (60°-80°)	9256.4	31.8			G4/12000
FVH (80°-90°)	334.1	1.1			G3/500
BL (0°-30°)	1652.3	5.7	B3/2500		
BM (30°-60°)	2514.2	8.6	B3/5000		
BH (60°-80°)	1110.5	3.8	B3/2500		G3/2500
BVH (80°-90°)	32.2	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°	4383.0	4383.0	4383.0	4383.0	4383.0	4383.0	4383.0	4383.0	4383.0	4383.0	4383.0
2.5°	4343.5	4384.4	4360.5	4357.6	4385.8	4359.0	4377.4	4373.1	4370.3	4374.6	4404.2
5°	4457.7	4505.7	4473.2	4463.4	4478.9	4430.9	4426.7	4416.8	4414.0	4415.4	4457.7
7.5°	4617.0	4673.4	4660.7	4635.4	4626.9	4548.0	4533.9	4498.6	4487.3	4490.2	4532.4
10°	4868.0	4924.4	4899.0	4842.6	4807.4	4717.1	4666.4	4621.3	4598.7	4601.5	4646.6
12.5°	5189.4	5243.0	5200.7	5097.8	5078.0	4932.8	4853.9	4758.0	4742.5	4719.9	4767.9
15°	5492.5	5539.0	5519.3	5423.4	5369.9	5197.9	5052.7	4934.2	4920.1	4899.0	4897.6
17.5°	5828.0	5874.6	5837.9	5767.4	5696.9	5492.5	5336.0	5183.8	5147.1	5128.8	5062.5
20°	6186.1	6259.4	6252.4	6194.6	6110.0	5870.3	5649.0	5477.0	5437.5	5403.7	5264.1
22.5°	6555.5	6651.3	6630.2	6599.2	6563.9	6294.7	6036.7	5837.9	5808.3	5736.4	5516.5
25°	6964.3	7030.6	7015.1	7030.6	7006.6	6768.4	6486.4	6243.9	6204.4	6136.8	5799.8
27.5°	7360.5	7429.5	7456.3	7423.9	7439.4	7268.8	6934.7	6717.6	6679.5	6555.5	6141.0
30°	7718.6	7804.6	7842.6	7856.7	7908.9	7732.7	7485.9	7222.3	7209.6	7082.7	6590.7
32.5°	8004.7	8100.6	8193.6	8254.3	8337.4	8259.9	8014.6	7855.3	7856.7	7742.5	7266.0
35°	8212.0	8321.9	8457.3	8618.0	8792.8	8760.4	8615.2	8618.0	8640.6	8678.6	8127.4
37.5°	8441.8	8530.6	8689.9	8914.0	9180.5	9248.2	9228.4	9452.6	9562.5	9630.2	8884.4
40°	8578.5	8668.7	8867.5	9169.2	9556.9	9719.0	9900.9	10294.2	10438.0	10367.5	9531.5
42.5°	8427.7	8508.0	8853.4	9375.0	9865.7	10233.6	10559.3	11134.5	11238.8	11009.0	10077.1
45°	8231.7	8336.0	8699.8	9431.4	10139.1	10738.3	11244.4	11866.1	11943.7	11618.0	10559.3
47.5°	8071.0	8162.6	8587.0	9370.8	10391.5	11255.7	11846.4	12556.9	12576.7	12174.9	11058.3
50°	7865.2	7976.5	8419.2	9296.1	10543.8	11713.9	12397.6	13201.2	13244.9	12751.5	11481.3
52.5°	7649.5	7758.0	8216.2	9173.4	10653.7	12094.5	12970.0	13886.3	13890.6	13361.9	11932.4
55°	7330.9	7446.5	7954.0	8995.8	10687.6	12346.9	13545.2	14585.6	14629.3	13980.8	12341.2
57.5°	6993.9	7092.6	7638.2	8719.5	10562.1	12585.1	14135.9	15362.4	15482.2	14678.6	12692.3
60°	6547.0	6645.7	7222.3	8357.2	10295.6	12853.0	14812.6	16298.5	16311.2	15244.0	12947.4
62.5°	6066.3	6152.3	6682.4	7789.0	9882.6	12955.9	15393.4	17047.1	17045.7	15747.3	13074.3
65°	5495.3	5530.6	6070.5	7091.2	9241.1	12805.0	15650.0	17540.5	17492.6	16109.6	13032.0
67.5°	4818.6	4856.7	5265.5	6224.2	8310.7	12215.8	15535.8	17778.8	17826.7	16432.4	12848.7
70°	3961.5	4006.6	4363.3	5172.5	7125.0	11275.4	15267.9	17881.7	17922.6	16302.7	12283.4
72.5°	2923.9	2984.5	3203.0	3850.1	5407.9	9473.7	14027.3	16755.3	16777.8	15220.0	11106.3
75°	1815.8	1927.2	2133.0	2558.8	3508.9	6644.3	11990.2	14978.9	14837.9	13576.2	9190.4
77.5°	726.0	744.4	847.3	1198.3	1711.5	3459.6	8691.3	11907.0	12176.3	10862.4	6573.8
80°	422.9	420.1	444.1	558.3	734.5	1182.8	3380.7	6679.5	7445.1	5966.2	2957.7
82.5°	341.2	328.5	328.5	358.1	352.4	497.7	1108.1	1951.1	2140.0	1899.0	841.6
85°	179.0	174.8	142.4	176.2	176.2	248.1	425.8	552.6	583.6	508.9	315.8
87.5°	45.1	45.1	45.1	55.0	43.7	52.2	71.9	87.4	90.2	73.3	46.5
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°	4383.0	4383.0	4383.0	4383.0	4383.0	4383.0	4383.0	4383.0	4383.0	4383.0	4383.0
2.5°	4415.4	4428.1	4477.5	4470.4	4478.9	4478.9	4493.0	4508.5	4555.0	4528.2	4516.9
5°	4466.2	4491.6	4553.6	4576.2	4610.0	4614.2	4642.4	4652.3	4703.0	4674.8	4674.8
7.5°	4563.5	4593.1	4650.9	4659.3	4674.8	4648.0	4655.1	4624.1	4657.9	4624.1	4625.5
10°	4673.4	4693.2	4732.6	4676.2	4652.3	4588.8	4574.7	4498.6	4525.4	4481.7	4470.4
12.5°	4779.2	4772.1	4742.5	4642.4	4576.2	4471.8	4428.1	4325.2	4319.6	4261.8	4250.5
15°	4879.3	4829.9	4734.0	4579.0	4466.2	4321.0	4216.7	4103.9	4064.4	3998.1	3992.5
17.5°	5001.9	4917.3	4746.7	4518.3	4333.7	4122.2	3974.2	3847.3	3765.5	3704.9	3703.5
20°	5151.3	5021.6	4752.4	4449.3	4196.9	3926.2	3719.0	3558.3	3441.3	3365.1	3363.7
22.5°	5338.8	5162.6	4804.5	4370.3	4022.1	3689.4	3431.4	3153.7	2993.0	2837.9	2809.7
25°	5558.8	5305.0	4849.6	4329.4	3850.1	3442.7	3059.2	2653.2	2403.7	2279.6	2233.1
27.5°	5867.5	5541.9	4915.9	4251.9	3688.0	3138.2	2579.9	2137.2	1836.9	1731.2	1731.2
30°	6224.2	5840.7	5040.0	4205.4	3462.4	2711.0	2054.1	1579.0	1299.8	1140.5	1136.3
32.5°	6768.4	6197.4	5152.8	4105.3	3188.9	2245.8	1485.9	1017.9	793.7	695.0	689.4
35°	7550.8	6876.9	5334.6	4005.2	2792.8	1672.0	943.1	583.6	452.5	396.1	393.3
37.5°	8303.6	7524.0	5726.5	3806.4	2230.3	1050.3	523.0	336.9	276.3	269.3	266.4
40°	8833.7	8082.3	6002.8	3503.3	1584.6	556.9	303.1	243.9	239.7	236.8	235.4
42.5°	9411.7	8496.8	6198.8	3117.0	940.3	322.8	246.7	219.9	212.9	210.1	210.1
45°	9881.2	8895.7	6235.5	2564.4	473.7	266.4	225.6	200.2	191.7	197.4	198.8
47.5°	10314.0	9272.1	6111.4	1928.6	320.0	248.1	211.5	186.1	180.5	194.5	194.5
50°	10683.3	9590.7	5826.6	1439.4	300.3	234.0	197.4	172.0	170.6	183.3	184.7
52.5°	11051.3	9847.3	5378.3	1086.9	284.8	218.5	183.3	159.3	155.1	163.5	164.9
55°	11343.1	9939.0	5045.6	809.2	273.5	204.4	170.6	146.6	136.7	135.3	138.2
57.5°	11503.8	9858.6	4719.9	594.9	260.8	191.7	157.9	129.7	114.2	114.2	114.2
60°	11506.6	9761.3	4371.7	470.9	246.7	177.6	143.8	111.4	95.9	93.0	93.0
62.5°	11475.6	9587.9	3865.6	408.8	231.2	166.4	125.5	94.5	83.2	78.9	78.9
65°	11338.9	9260.9	3252.4	349.6	212.9	157.9	107.1	84.6	74.7	69.1	69.1
67.5°	10913.1	8647.6	2503.8	304.5	196.0	139.6	97.3	76.1	66.3	60.6	59.2
70°	10132.1	7656.5	1652.3	259.4	179.0	124.1	88.8	69.1	59.2	53.6	52.2
72.5°	8822.4	6231.2	830.4	219.9	153.7	114.2	80.4	60.6	50.8	45.1	45.1
75°	6913.6	4325.2	452.5	174.8	121.2	100.1	70.5	50.8	43.7	39.5	39.5
77.5°	4239.2	2144.3	308.7	135.3	91.6	81.8	56.4	42.3	38.1	36.7	36.7
80°	1546.5	702.1	207.2	95.9	69.1	63.4	45.1	36.7	35.2	35.2	35.2
82.5°	558.3	356.7	139.6	64.8	43.7	47.9	36.7	31.0	29.6	31.0	32.4
85°	229.8	156.5	50.8	36.7	24.0	25.4	22.6	21.1	22.6	24.0	24.0
87.5°	35.2	31.0	18.3	18.3	14.1	12.7	9.9	11.3	14.1	16.9	16.9
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)