

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: P510166

Luminaire Tested: **VERD-M-CA4-220-727-U-T3-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510166  
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-CA4-220-727-U-T3-HSS  
Description: VERDEON-M ROADWAY AND AREA LUMINAIRE  
(4) 70 CRI, 2700K, 1000mA LEDS AND TYPE III OPTICS WITH HOUSE SIDE SHIELD  
Light Source: -  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 24674 lumens  
Efficiency: N/A  
Efficacy: 110.9 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

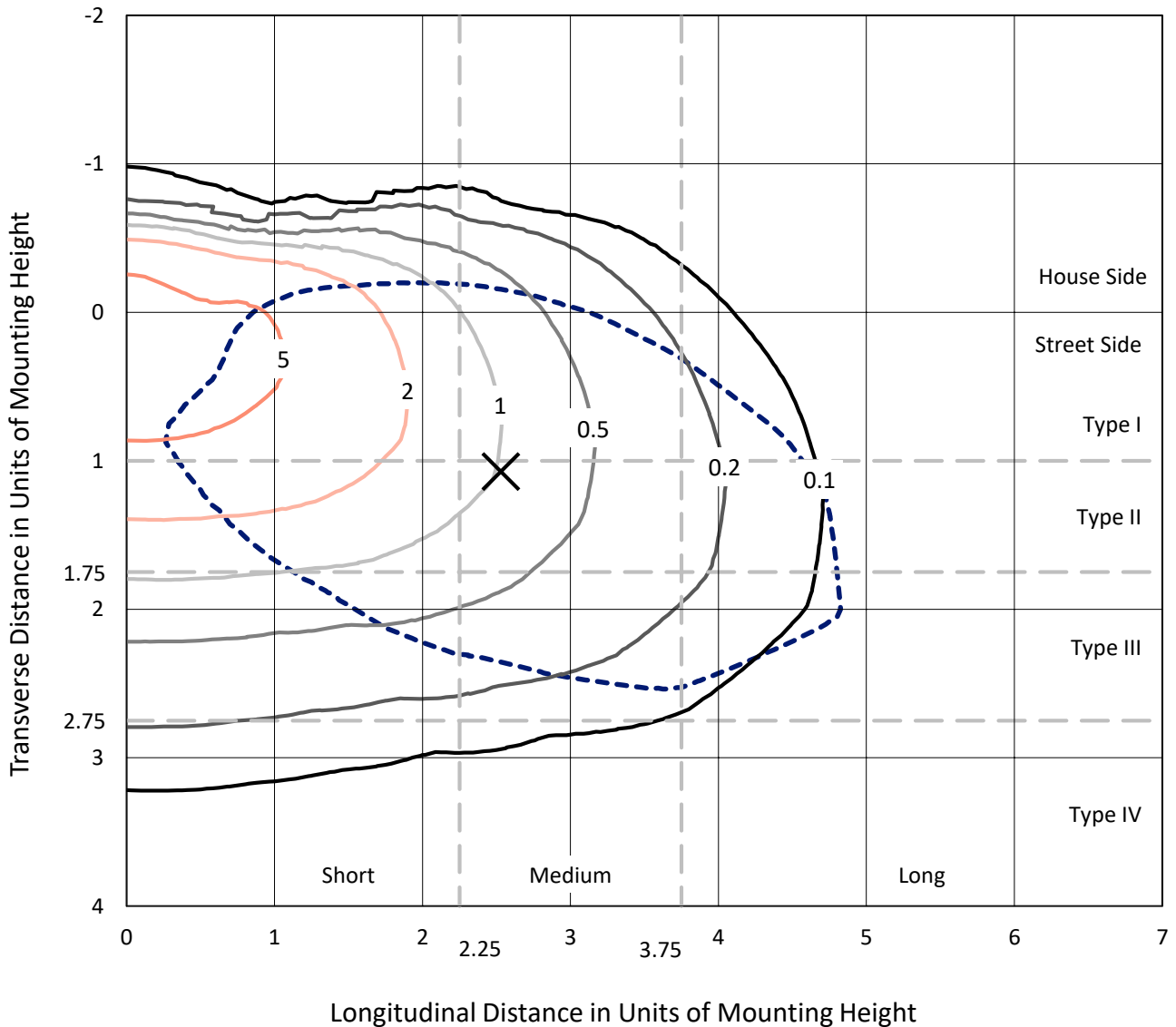
Input Watts (W): 222.5  
Input Voltage (V): NR  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

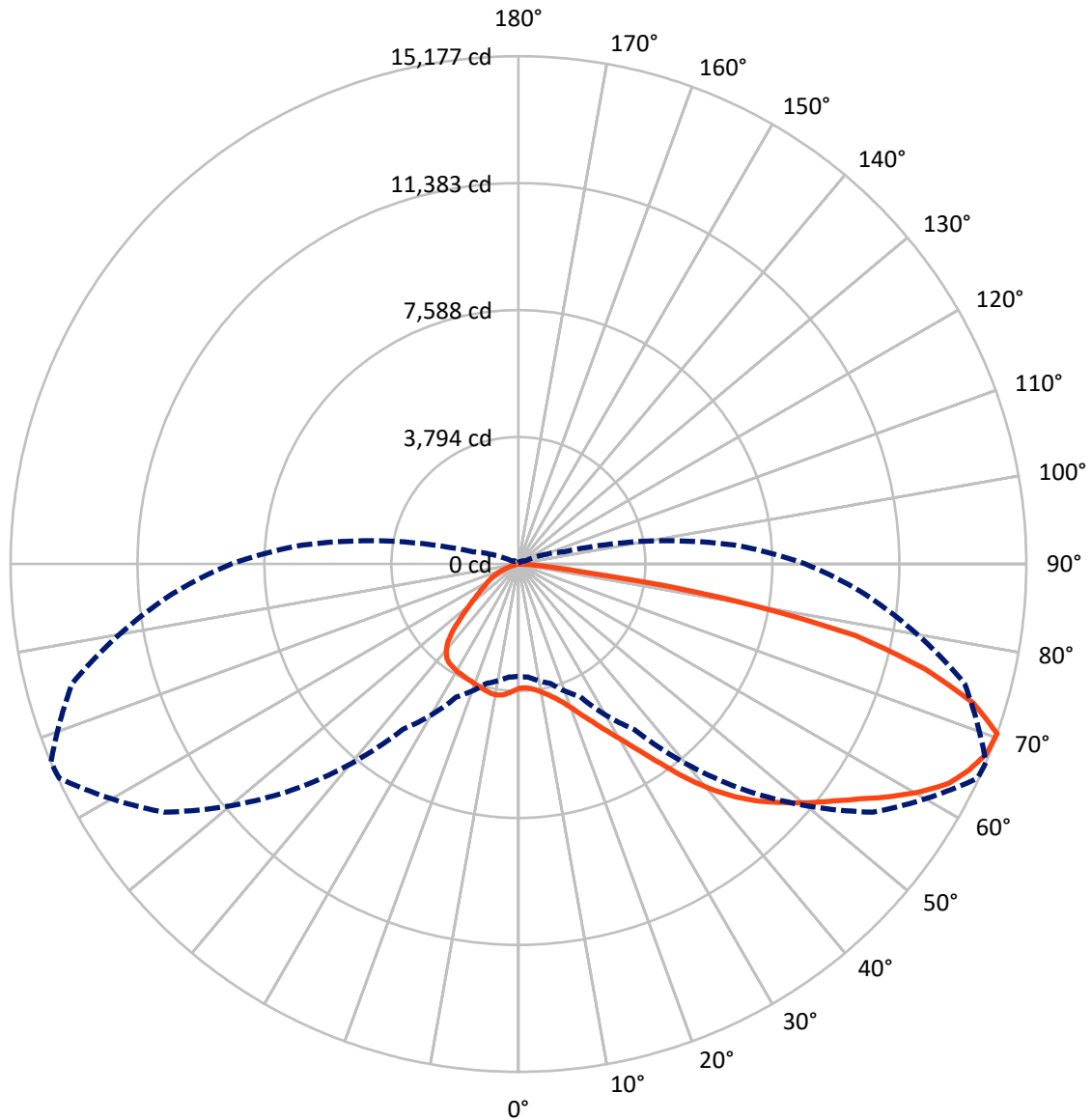
✕ Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.1 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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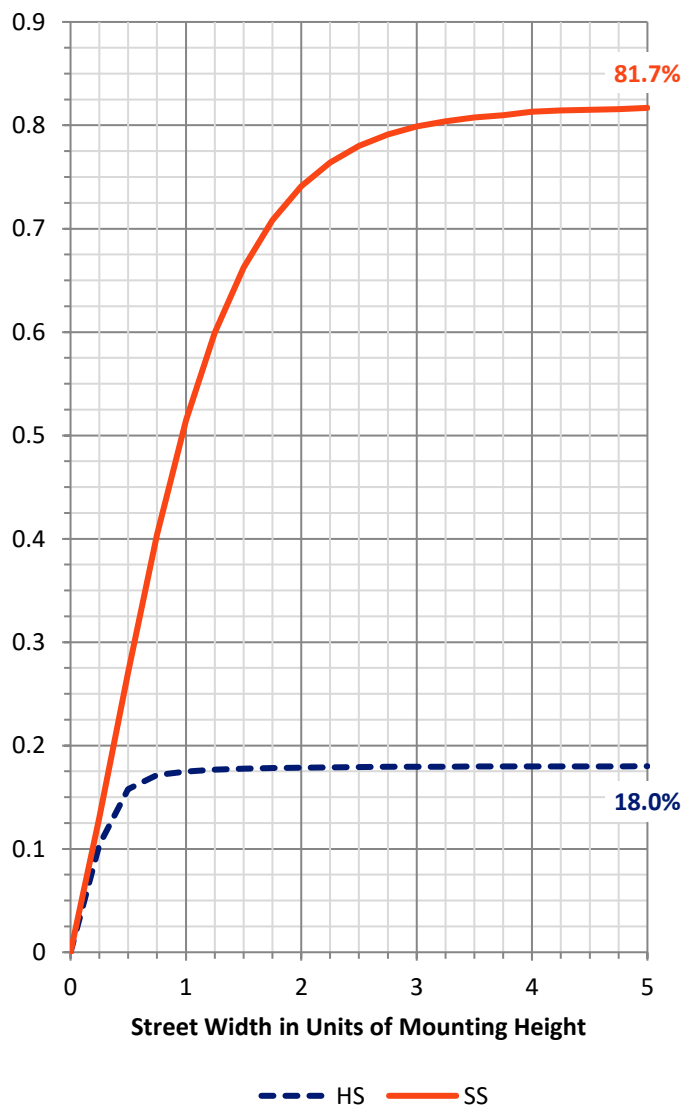
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	4495.8	0.0	4495.8
	% Fixture	18.2	0.0	18.2
<b>Street Side</b>	Lumens	20178.2	0.0	20178.2
	% Fixture	81.8	0.0	81.8
<b>Total</b>	Lumens	24674.0	0.0	24674.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	369.8	1.5
10°-20°	1153.6	4.7
20°-30°	2001.6	8.1
30°-40°	2972.8	12.0
40°-50°	4078.5	16.5
50°-60°	5008.7	20.3
60°-70°	5369.8	21.8
70°-80°	3408.9	13.8
80°-90°	310.2	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°	24674.0	100.0
0°-180°	24674.0	100.0

**Coefficient of Utilization**



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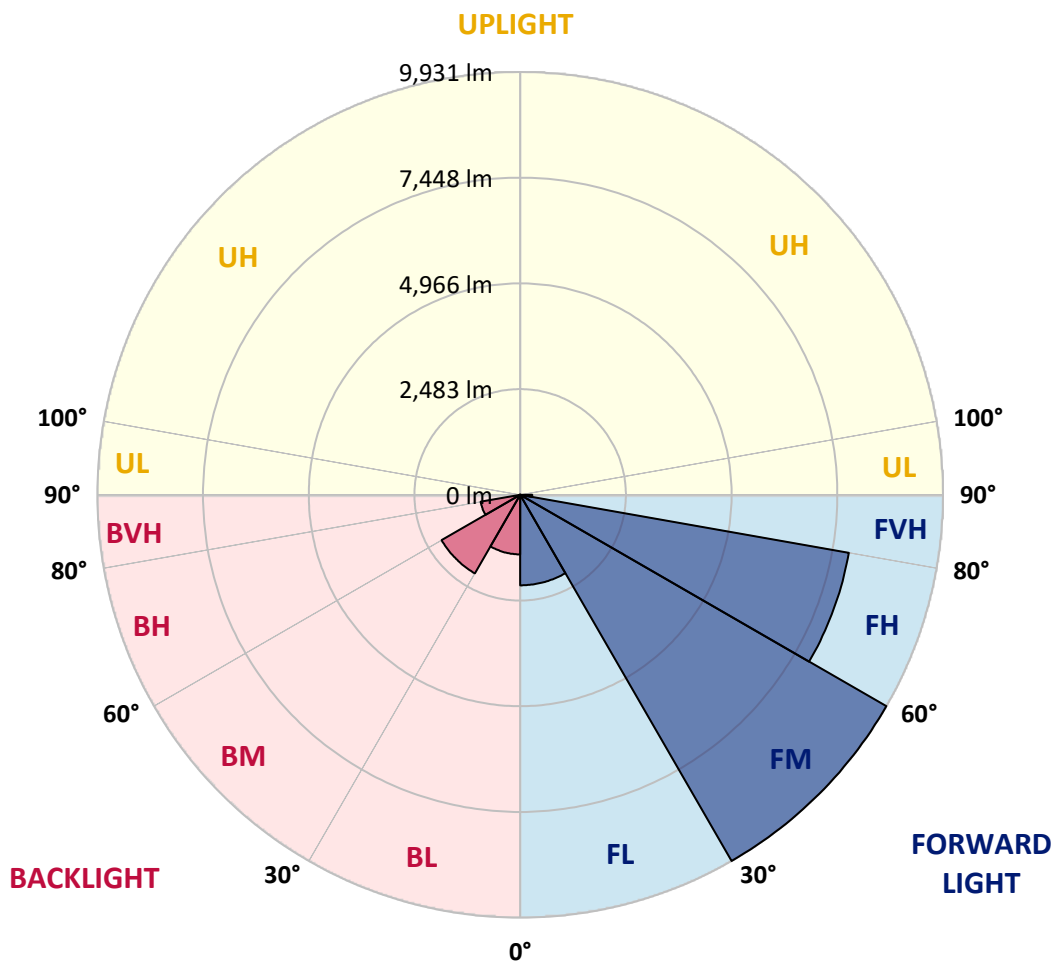
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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2125.9	8.6			
FM (30°-60°)	9931.0	40.2			
FH (60°-80°)	7838.3	31.8			G4/12000
FVH (80°-90°)	283.0	1.1			G3/500
BL (0°-30°)	1399.2	5.7	B3/2500		
BM (30°-60°)	2129.0	8.6	B2/2500		
BH (60°-80°)	940.4	3.8	B2/1000		G2/1000
BVH (80°-90°)	27.3	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°	3711.5	3711.5	3711.5	3711.5	3711.5	3711.5	3711.5	3711.5	3711.5	3711.5	3711.5
2.5°	3678.1	3712.7	3692.4	3690.0	3713.9	3691.2	3706.7	3703.2	3700.8	3704.4	3729.4
5°	3774.8	3815.4	3787.9	3779.6	3792.7	3752.1	3748.5	3740.2	3737.8	3739.0	3774.8
7.5°	3909.7	3957.4	3946.7	3925.2	3918.1	3851.2	3839.3	3809.4	3799.9	3802.3	3838.1
10°	4122.2	4169.9	4148.5	4100.7	4070.9	3994.5	3951.5	3913.3	3894.2	3896.6	3934.8
12.5°	4394.4	4439.7	4403.9	4316.8	4300.1	4177.1	4110.3	4029.1	4015.9	3996.8	4037.4
15°	4651.0	4690.4	4673.7	4592.5	4547.2	4401.5	4278.6	4178.3	4166.4	4148.5	4147.3
17.5°	4935.2	4974.6	4943.5	4883.8	4824.1	4651.0	4518.5	4389.6	4358.6	4343.0	4286.9
20°	5238.4	5300.5	5294.5	5245.6	5173.9	4971.0	4783.6	4637.9	4604.5	4575.8	4457.6
22.5°	5551.2	5632.3	5614.4	5588.2	5558.3	5330.3	5111.9	4943.5	4918.5	4857.6	4671.3
25°	5897.4	5953.5	5940.3	5953.5	5933.2	5731.4	5492.7	5287.3	5253.9	5196.6	4911.3
27.5°	6232.8	6291.3	6314.0	6286.6	6299.7	6155.2	5872.3	5688.5	5656.2	5551.2	5200.2
30°	6536.1	6608.9	6641.1	6653.0	6697.2	6548.0	6339.1	6115.8	6105.1	5997.7	5581.0
32.5°	6778.4	6859.6	6938.4	6989.7	7060.1	6994.5	6786.8	6651.9	6653.0	6556.4	6152.8
35°	6953.9	7047.0	7161.6	7297.7	7445.7	7418.3	7295.3	7297.7	7316.8	7349.0	6882.3
37.5°	7148.5	7223.7	7358.6	7548.4	7774.0	7831.3	7814.6	8004.4	8097.5	8154.8	7523.3
40°	7264.3	7340.7	7509.0	7764.5	8092.8	8230.1	8384.1	8717.1	8838.9	8779.2	8071.3
42.5°	7136.5	7204.6	7497.1	7938.8	8354.2	8665.8	8941.6	9428.6	9517.0	9322.4	8533.3
45°	6970.6	7058.9	7366.9	7986.5	8585.8	9093.2	9521.7	10048.2	10113.9	9838.1	8941.6
47.5°	6834.5	6912.1	7271.4	7935.2	8799.5	9531.3	10031.5	10633.2	10649.9	10309.7	9364.2
50°	6660.2	6754.5	7129.4	7871.9	8928.4	9919.3	10498.3	11178.7	11215.8	10797.9	9722.3
52.5°	6477.6	6569.5	6957.5	7768.1	9021.5	10241.6	10983.0	11758.9	11762.5	11314.8	10104.3
55°	6207.8	6305.7	6735.4	7617.6	9050.2	10455.3	11470.0	12351.1	12388.1	11838.9	10450.5
57.5°	5922.4	6006.0	6468.0	7383.7	8944.0	10657.1	11970.2	13008.8	13110.3	12429.8	10747.8
60°	5544.0	5627.6	6115.8	7076.8	8718.3	10883.9	12543.3	13801.5	13812.3	12908.6	10963.9
62.5°	5136.9	5209.7	5658.6	6595.7	8368.5	10971.0	13035.1	14435.4	14434.2	13334.7	11071.3
65°	4653.4	4683.3	5140.5	6004.8	7825.4	10843.3	13252.4	14853.3	14812.7	13641.6	11035.5
67.5°	4080.4	4112.6	4458.8	5270.6	7037.5	10344.3	13155.7	15055.0	15095.6	13914.9	10880.3
70°	3354.6	3392.8	3694.8	4380.1	6033.5	9548.0	12928.9	15142.2	15176.8	13805.1	10401.6
72.5°	2475.9	2527.3	2712.3	3260.3	4579.4	8022.3	11878.3	14188.3	14207.4	12888.3	9404.8
75°	1537.6	1631.9	1806.2	2166.7	2971.4	5626.4	10153.3	12684.1	12564.7	11496.3	7782.4
77.5°	614.8	630.3	717.5	1014.7	1449.3	2929.6	7359.8	10082.8	10310.9	9198.2	5566.7
80°	358.1	355.8	376.0	472.7	622.0	1001.6	2862.7	5656.2	6304.5	5052.2	2504.6
82.5°	288.9	278.2	278.2	303.2	298.5	421.4	938.3	1652.2	1812.2	1608.0	712.7
85°	151.6	148.0	120.6	149.2	149.2	210.1	360.5	468.0	494.2	431.0	267.4
87.5°	38.2	38.2	38.2	46.6	37.0	44.2	60.9	74.0	76.4	62.1	39.4
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°	3711.5	3711.5	3711.5	3711.5	3711.5	3711.5	3711.5	3711.5	3711.5	3711.5	3711.5
2.5°	3739.0	3749.7	3791.5	3785.5	3792.7	3792.7	3804.6	3817.8	3857.2	3834.5	3824.9
5°	3782.0	3803.4	3856.0	3875.1	3903.7	3907.3	3931.2	3939.5	3982.5	3958.6	3958.6
7.5°	3864.3	3889.4	3938.3	3945.5	3958.6	3936.0	3941.9	3915.7	3944.3	3915.7	3916.9
10°	3957.4	3974.2	4007.6	3959.8	3939.5	3885.8	3873.9	3809.4	3832.1	3795.1	3785.5
12.5°	4047.0	4041.0	4015.9	3931.2	3875.1	3786.7	3749.7	3662.6	3657.8	3608.9	3599.3
15°	4131.7	4090.0	4008.8	3877.5	3782.0	3659.0	3570.7	3475.2	3441.7	3385.6	3380.8
17.5°	4235.6	4164.0	4019.5	3826.1	3669.7	3490.7	3365.3	3257.9	3188.6	3137.3	3136.1
20°	4362.1	4252.3	4024.3	3767.6	3553.9	3324.7	3149.2	3013.2	2914.1	2849.6	2848.4
22.5°	4520.9	4371.7	4068.5	3700.8	3405.9	3124.2	2905.7	2670.5	2534.4	2403.1	2379.2
25°	4707.2	4492.3	4106.7	3666.2	3260.3	2915.3	2590.5	2246.7	2035.4	1930.4	1891.0
27.5°	4968.6	4692.8	4162.8	3600.5	3123.0	2657.4	2184.7	1809.8	1555.5	1466.0	1466.0
30°	5270.6	4945.9	4267.8	3561.1	2932.0	2295.7	1739.4	1337.1	1100.7	965.8	962.2
32.5°	5731.4	5247.9	4363.3	3476.3	2700.4	1901.7	1258.3	861.9	672.1	588.5	583.8
35°	6394.0	5823.4	4517.3	3391.6	2364.9	1415.8	798.7	494.2	383.2	335.5	333.1
37.5°	7031.5	6371.3	4849.2	3223.3	1888.6	889.4	442.9	285.3	234.0	228.0	225.6
40°	7480.4	6844.1	5083.2	2966.6	1341.8	471.6	256.7	206.5	202.9	200.6	199.4
42.5°	7969.8	7195.0	5249.1	2639.5	796.3	273.4	208.9	186.2	180.3	177.9	177.9
45°	8367.3	7532.9	5280.2	2171.5	401.1	225.6	191.0	169.5	162.4	167.1	168.3
47.5°	8733.8	7851.6	5175.1	1633.1	271.0	210.1	179.1	157.6	152.8	164.7	164.7
50°	9046.6	8121.4	4934.0	1218.9	254.3	198.2	167.1	145.6	144.4	155.2	156.4
52.5°	9358.2	8338.7	4554.3	920.4	241.1	185.0	155.2	134.9	131.3	138.5	139.7
55°	9605.3	8416.3	4272.6	685.2	231.6	173.1	144.4	124.2	115.8	114.6	117.0
57.5°	9741.4	8348.2	3996.8	503.8	220.9	162.4	133.7	109.8	96.7	96.7	96.7
60°	9743.8	8265.9	3702.0	398.7	208.9	150.4	121.8	94.3	81.2	78.8	78.8
62.5°	9717.5	8119.0	3273.4	346.2	195.8	140.9	106.2	80.0	70.4	66.9	66.9
65°	9601.7	7842.1	2754.1	296.1	180.3	133.7	90.7	71.6	63.3	58.5	58.5
67.5°	9241.2	7322.8	2120.2	257.9	165.9	118.2	82.4	64.5	56.1	51.3	50.1
70°	8579.8	6483.5	1399.1	219.7	151.6	105.1	75.2	58.5	50.1	45.4	44.2
72.5°	7470.8	5276.6	703.1	186.2	130.1	96.7	68.0	51.3	43.0	38.2	38.2
75°	5854.4	3662.6	383.2	148.0	102.7	84.8	59.7	43.0	37.0	33.4	33.4
77.5°	3589.8	1815.8	261.4	114.6	77.6	69.2	47.8	35.8	32.2	31.0	31.0
80°	1309.6	594.5	175.5	81.2	58.5	53.7	38.2	31.0	29.8	29.8	29.8
82.5°	472.7	302.0	118.2	54.9	37.0	40.6	31.0	26.3	25.1	26.3	27.5
85°	194.6	132.5	43.0	31.0	20.3	21.5	19.1	17.9	19.1	20.3	20.3
87.5°	29.8	26.3	15.5	15.5	11.9	10.7	8.4	9.6	11.9	14.3	14.3
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)