

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: P841155

Luminaire Tested: **ARCH4-140-727-U-T2R**

Issue Date: 5/27/2024

Test Information

Test Method: LM-79-08
Report Number: P841155
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2403-329-1)
Test Lab: INNOVATION CENTER
Issue Date: 5/27/2024
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH4-140-727-U-T2R
Description: ARCHEON CONTEMPORARY ROADWAY AND AREA LUMINAIRE
(2) 70 CRI, 2700K, 1155mA LIGHTSQUARES WITH 40 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 22605 lumens
Efficiency: N/A
Efficacy: 160.0 lumens/watt
Luminous Opening: Rectangular (W 1.17' x L: 0.58' x H: 0')
IES Classification: Type II - Medium
BUG Rating: B3 - U0 - G3

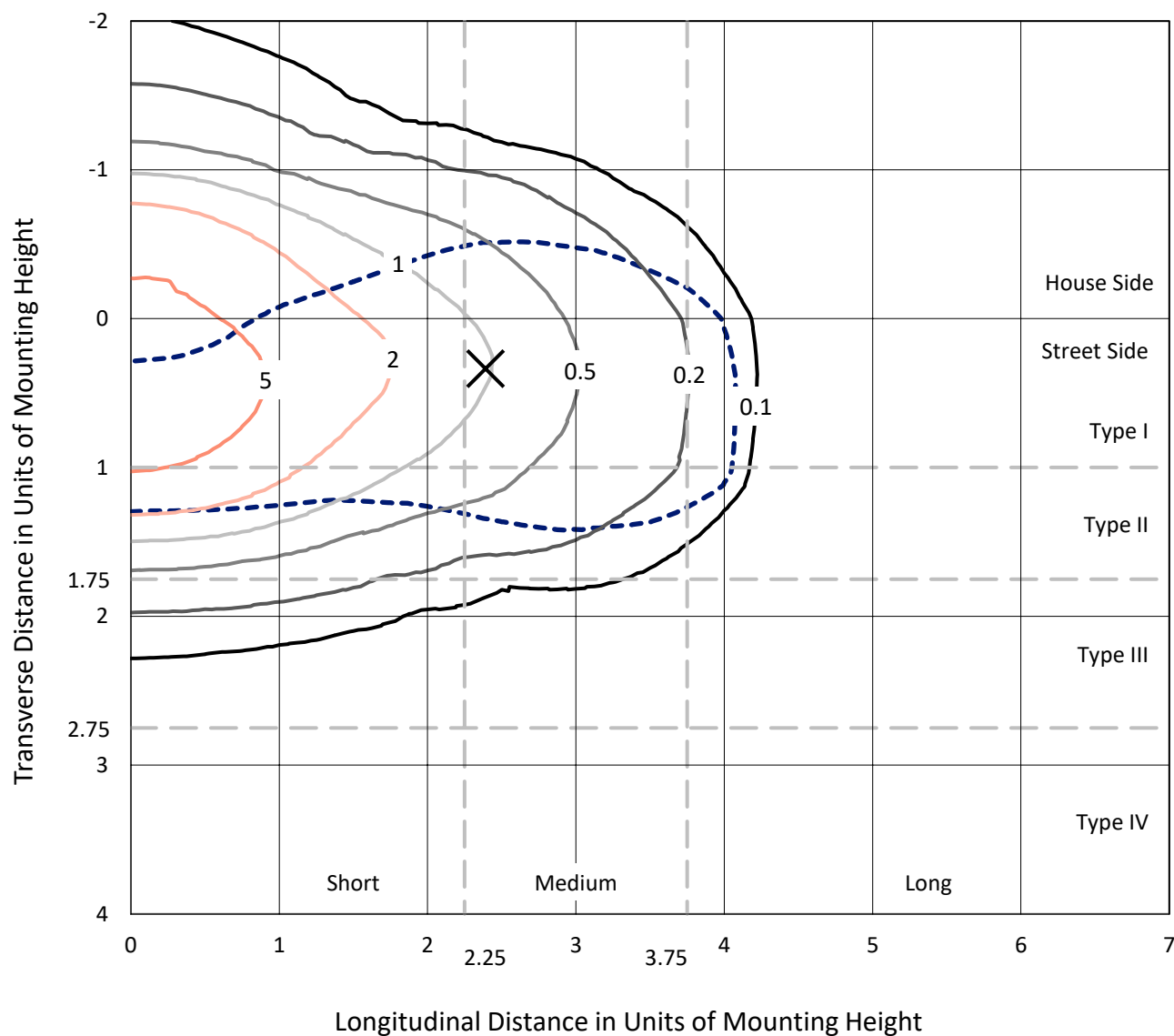
Input Watts (W): 141.3
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

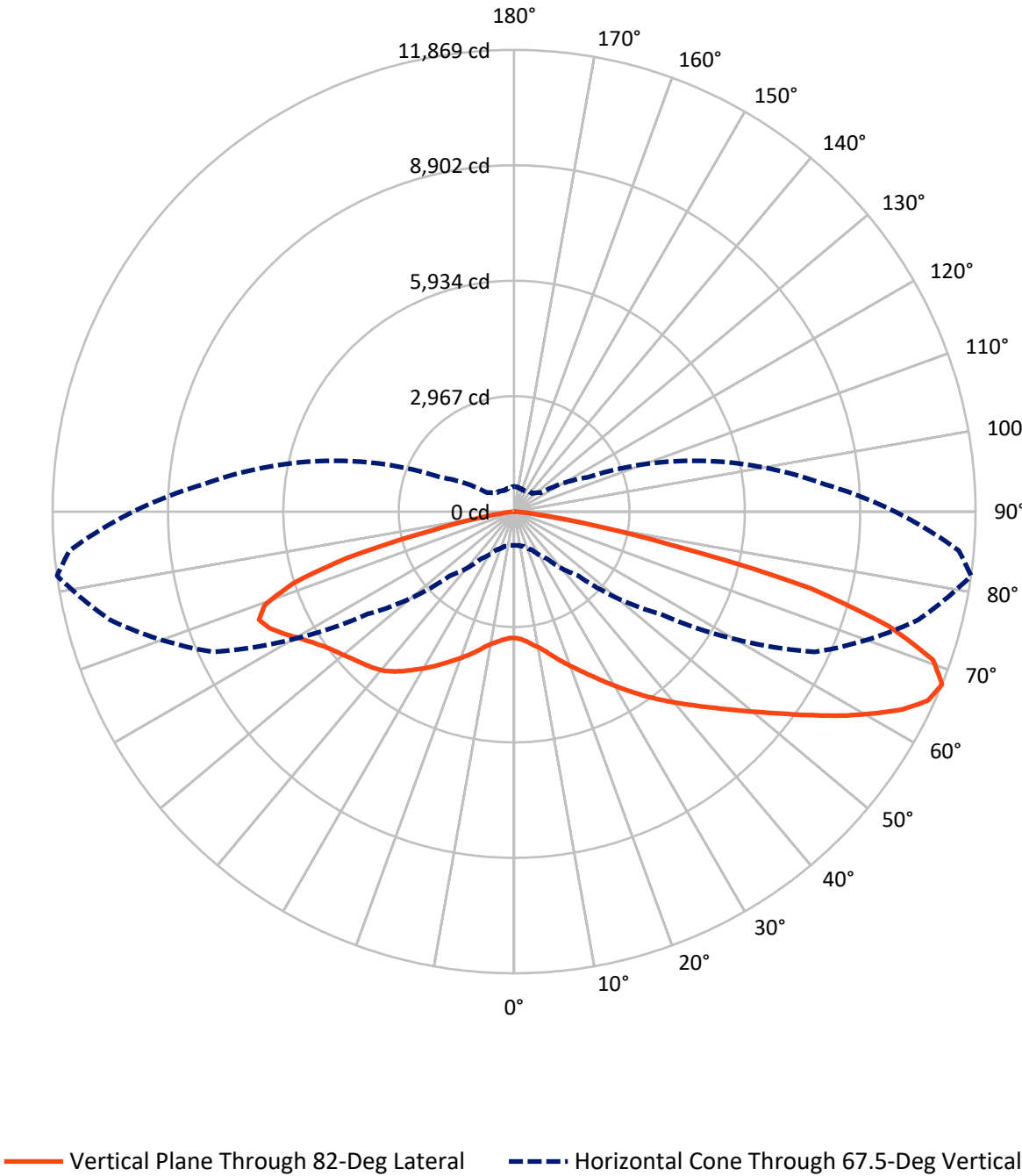
× Max cd
 - - - 1/2 Max cd



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

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Luminous Intensity Polar Plot



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FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6884.1	0.0	6884.1
	% Fixture	30.5	0.0	30.5
Street Side	Lumens	15720.9	0.0	15720.9
	% Fixture	69.5	0.0	69.5
Total	Lumens	22605.0	0.0	22605.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	335.8	1.5
10°-20°	1209.6	5.4
20°-30°	2431.1	10.8
30°-40°	3818.9	16.9
40°-50°	4652.1	20.6
50°-60°	4395.7	19.4
60°-70°	3629.8	16.1
70°-80°	1976.6	8.7
80°-90°	155.4	0.7
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°	22605.0	100.0
0°-180°	22605.0	100.0

Coefficient of Utilization



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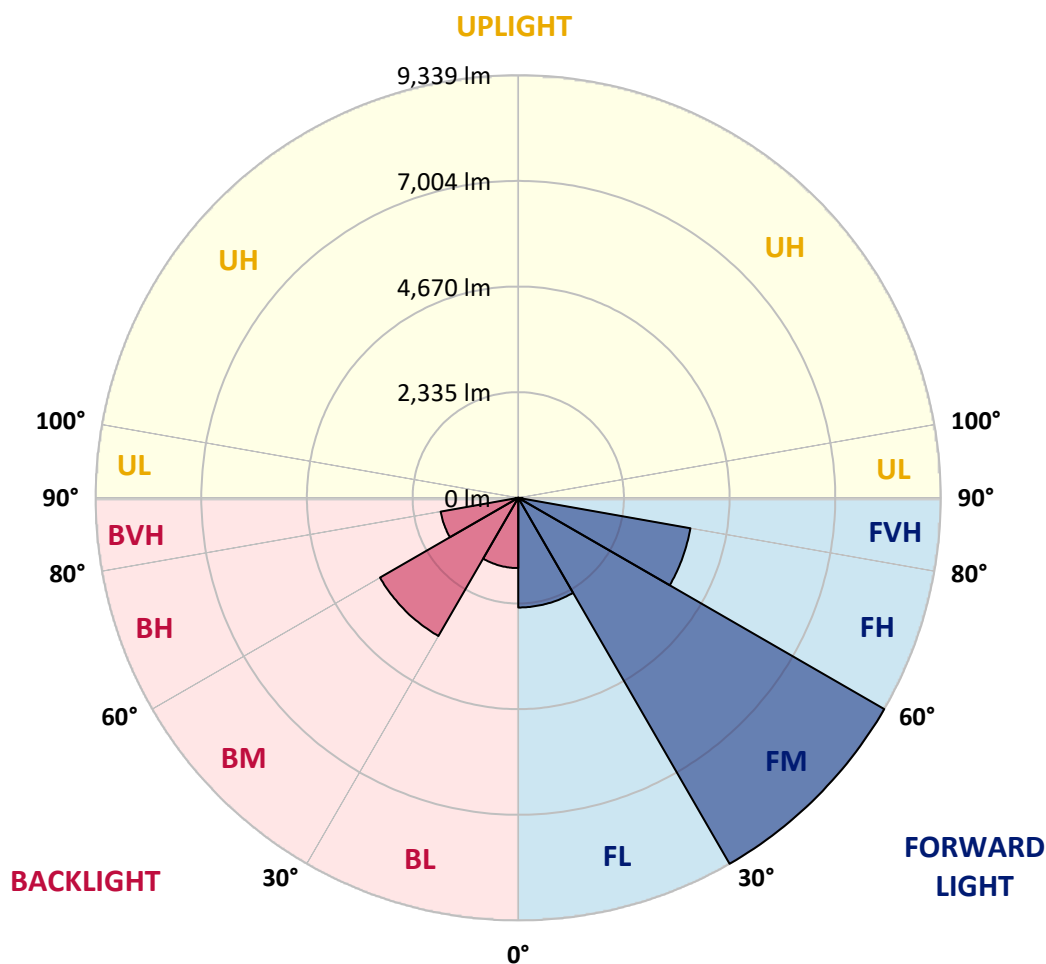
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2424.1	10.7			
FM	(30°-60°)	9339.1	41.3			
FH	(60°-80°)	3864.0	17.1			G2/5000
FVH	(80°-90°)	93.7	0.4			G1/100
BL	(0°-30°)	1552.4	6.9	B3/2500		
BM	(30°-60°)	3527.6	15.6	B3/5000		
BH	(60°-80°)	1742.4	7.7	B3/2500		G3/2500
BVH	(80°-90°)	61.7	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 Medium



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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	82°	85°
0°	3249.5	3249.5	3249.5	3249.5	3249.5	3249.5	3249.5	3249.5	3249.5	3249.5	3249.5
2.5°	3397.2	3397.2	3423.4	3423.4	3400.4	3364.3	3354.5	3315.1	3279.0	3279.0	3282.3
5°	3722.1	3718.8	3738.5	3712.3	3656.5	3584.2	3535.0	3449.7	3377.5	3354.5	3351.2
7.5°	4119.3	4116.0	4125.8	4083.2	3978.1	3860.0	3761.5	3623.6	3505.5	3456.2	3443.1
10°	4562.4	4559.1	4549.2	4477.0	4335.9	4152.1	4004.4	3814.0	3636.8	3558.0	3541.6
12.5°	5071.1	5064.6	5041.6	4936.5	4742.9	4506.6	4293.2	4047.1	3810.7	3702.4	3666.3
15°	5639.0	5629.1	5586.4	5458.4	5199.1	4900.4	4624.7	4309.6	4020.8	3879.7	3830.4
17.5°	6236.3	6236.3	6170.7	5980.3	5691.5	5320.6	4979.2	4578.8	4240.7	4066.7	4007.7
20°	6843.6	6840.3	6758.2	6528.5	6187.1	5760.4	5327.1	4887.3	4467.2	4257.1	4184.9
22.5°	7483.6	7477.0	7375.3	7112.7	6705.7	6223.2	5717.7	5192.6	4716.6	4463.9	4372.0
25°	8218.8	8209.0	8084.3	7762.6	7280.1	6735.2	6157.6	5550.3	5002.2	4693.7	4585.3
27.5°	9000.0	8986.9	8839.2	8465.0	7936.6	7280.1	6643.3	5963.9	5317.3	4949.7	4828.2
30°	9695.9	9686.0	9525.2	9141.1	8533.9	7821.7	7106.1	6377.5	5648.8	5222.1	5071.1
32.5°	10221.0	10221.0	10076.6	9699.1	9068.9	8340.3	7572.2	6768.1	5993.4	5514.2	5337.0
35°	10539.4	10549.2	10424.5	10122.6	9528.5	8829.3	8054.7	7227.6	6361.1	5826.0	5635.7
37.5°	10585.4	10618.2	10546.0	10342.5	9846.8	9236.3	8527.4	7670.7	6741.8	6141.1	5927.8
40°	10372.0	10395.0	10398.3	10319.5	9978.1	9528.5	8944.2	8140.1	7145.5	6472.7	6226.5
42.5°	9945.3	9961.7	9991.3	10014.2	9882.9	9656.5	9262.6	8576.6	7575.5	6810.7	6521.9
45°	9393.9	9390.6	9439.8	9538.3	9531.7	9584.3	9439.8	8973.8	8021.9	7194.8	6850.1
47.5°	8570.0	8553.6	8727.6	8950.8	9062.4	9308.5	9443.1	9285.6	8507.7	7618.2	7224.3
50°	7280.1	7263.7	7644.4	8169.6	8497.8	8872.0	9262.6	9472.7	9016.4	8094.1	7631.3
52.5°	5711.2	5694.8	6177.3	7096.3	7811.8	8356.7	8898.3	9515.3	9498.9	8625.8	8090.8
55°	4247.3	4234.1	4703.5	5698.0	6856.7	7759.3	8451.9	9403.7	9951.9	9236.3	8648.8
57.5°	2993.4	2986.9	3393.9	4217.7	5629.1	7030.6	8021.9	9187.1	10368.7	9899.4	9279.0
60°	2100.7	2090.8	2386.2	3023.0	4257.1	5931.1	7595.2	8898.3	10680.5	10552.5	9948.6
62.5°	1414.7	1408.1	1618.2	2149.9	3023.0	4565.7	6948.6	8704.6	10857.8	11209.0	10624.7
65°	1073.3	1070.0	1165.2	1457.3	2140.0	3279.0	5921.2	8681.6	10880.8	11701.3	11199.1
67.5°	866.5	869.8	922.3	1089.7	1480.3	2330.4	4591.9	8537.2	10759.3	11868.7	11478.1
70°	709.0	709.0	731.9	843.5	1093.0	1572.2	3206.8	7880.8	10421.2	11432.2	11146.6
72.5°	541.6	544.9	617.1	682.7	823.9	1102.8	2054.7	6521.9	9623.6	10079.9	9863.3
75°	430.0	426.7	469.4	561.3	640.0	787.7	1260.4	4677.2	8189.3	7877.5	7739.6
77.5°	308.5	305.3	338.1	416.8	485.8	558.0	751.6	2360.0	4454.1	4093.0	3991.3
80°	210.1	203.5	233.0	288.8	321.7	328.2	367.6	905.9	1943.1	1831.5	1808.5
82.5°	108.3	108.3	124.7	164.1	167.4	170.7	164.1	292.1	643.3	600.7	574.4
85°	42.7	42.7	46.0	55.8	55.8	59.1	59.1	75.5	68.9	65.6	62.4
87.5°	3.3	3.3	6.6	6.6	9.8	9.8	9.8	13.1	16.4	16.4	16.4
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°	3249.5	3249.5	3249.5	3249.5	3249.5	3249.5	3249.5	3249.5	3249.5	3249.5	3249.5
2.5°	3275.7	3262.6	3219.9	3210.1	3203.5	3193.7	3196.9	3174.0	3164.1	3167.4	3154.3
5°	3334.8	3311.8	3259.3	3236.3	3229.8	3219.9	3229.8	3213.4	3196.9	3203.5	3196.9
7.5°	3416.9	3384.0	3318.4	3295.4	3292.1	3282.3	3295.4	3282.3	3269.2	3275.7	3262.6
10°	3502.2	3459.5	3387.3	3364.3	3364.3	3361.1	3374.2	3354.5	3341.4	3344.6	3338.1
12.5°	3626.9	3571.1	3492.3	3472.7	3462.8	3472.7	3475.9	3449.7	3426.7	3430.0	3420.1
15°	3777.9	3715.5	3630.2	3600.7	3594.1	3590.8	3577.7	3544.9	3515.3	3512.0	3502.2
17.5°	3942.0	3863.2	3761.5	3732.0	3702.4	3692.6	3659.7	3617.1	3571.1	3571.1	3558.0
20°	4099.6	4010.9	3889.5	3846.8	3804.2	3764.8	3709.0	3640.0	3581.0	3571.1	3558.0
22.5°	4270.2	4165.2	4024.1	3961.7	3886.2	3807.4	3712.3	3620.4	3544.9	3528.5	3518.6
25°	4460.6	4329.3	4161.9	4070.0	3948.6	3827.1	3686.0	3567.8	3479.2	3453.0	3446.4
27.5°	4670.7	4513.1	4309.6	4175.1	3997.8	3807.4	3626.9	3485.8	3377.5	3344.6	3334.8
30°	4884.0	4696.9	4444.2	4247.3	3997.8	3745.1	3518.6	3354.5	3229.8	3183.8	3177.2
32.5°	5097.4	4887.3	4565.7	4286.7	3958.4	3640.0	3377.5	3183.8	3042.7	2986.9	3000.0
35°	5353.4	5097.4	4677.2	4303.1	3892.8	3512.0	3216.6	2990.2	2845.7	2796.5	2806.3
37.5°	5619.3	5307.4	4765.9	4289.9	3800.9	3367.6	3036.1	2816.2	2635.7	2550.3	2560.2
40°	5849.0	5497.8	4828.2	4244.0	3682.7	3203.5	2858.9	2570.0	2320.6	2238.5	2228.7
42.5°	6065.7	5639.0	4861.1	4175.1	3548.1	3013.1	2606.1	2235.2	1985.8	1884.0	1887.3
45°	6292.1	5776.8	4847.9	4083.2	3380.7	2789.9	2281.2	1907.0	1687.1	1595.2	1598.5
47.5°	6551.4	5924.5	4834.8	3984.7	3177.2	2501.1	1969.4	1618.2	1427.8	1362.1	1355.6
50°	6827.1	6088.6	4818.4	3863.2	2950.8	2179.4	1660.8	1349.0	1188.2	1145.5	1135.7
52.5°	7139.0	6265.9	4808.5	3718.8	2678.3	1838.1	1385.1	1112.7	1004.4	974.8	971.6
55°	7513.1	6472.7	4821.7	3544.9	2350.1	1516.4	1152.1	958.4	886.2	869.8	866.5
57.5°	7969.4	6738.5	4861.1	3341.4	2005.5	1237.4	981.4	863.2	817.3	804.2	804.2
60°	8465.0	7040.5	4933.3	3111.6	1660.8	1020.8	869.8	787.7	768.1	784.5	784.5
62.5°	9000.0	7395.0	5061.3	2832.6	1339.2	863.2	781.2	725.4	712.3	745.1	748.4
65°	9495.6	7739.6	5143.3	2497.8	1063.5	748.4	712.3	663.0	669.6	702.4	699.1
67.5°	9800.9	8025.2	5028.5	2077.7	843.5	663.0	640.0	597.4	613.8	640.0	643.3
70°	9613.8	7864.3	4460.6	1568.9	659.7	577.7	561.3	535.0	548.1	581.0	594.1
72.5°	8698.0	7043.8	3469.4	1060.2	531.7	485.8	492.3	479.2	495.6	525.2	554.7
75°	7060.2	5323.9	2327.1	679.4	420.1	413.6	423.4	413.6	420.1	449.7	466.1
77.5°	3686.0	2596.3	1158.6	423.4	311.8	321.7	338.1	341.4	361.1	367.6	374.2
80°	1719.9	1168.5	482.5	236.3	206.8	226.5	259.3	262.6	269.1	279.0	282.3
82.5°	561.3	351.2	223.2	128.0	118.2	128.0	167.4	200.2	203.5	223.2	223.2
85°	59.1	36.1	49.2	52.5	46.0	55.8	75.5	72.2	32.8	19.7	19.7
87.5°	16.4	13.1	16.4	16.4	13.1	13.1	9.8	3.3	0.0	0.0	0.0
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)