

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: P721878

Luminaire Tested: **CST-CA8-400-760-U-T2-HSS**

Issue Date: 10/25/2023

Test Information

Test Method: LM-79-08
Report Number: P721878
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-15)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 10/25/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-400-760-U-T2-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 5700K CCT, 70 CRI LEDS
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 55101 lumens
Efficiency: N/A
Efficacy: 137.5 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type II - Short
BUG Rating: B4 - U0 - G5

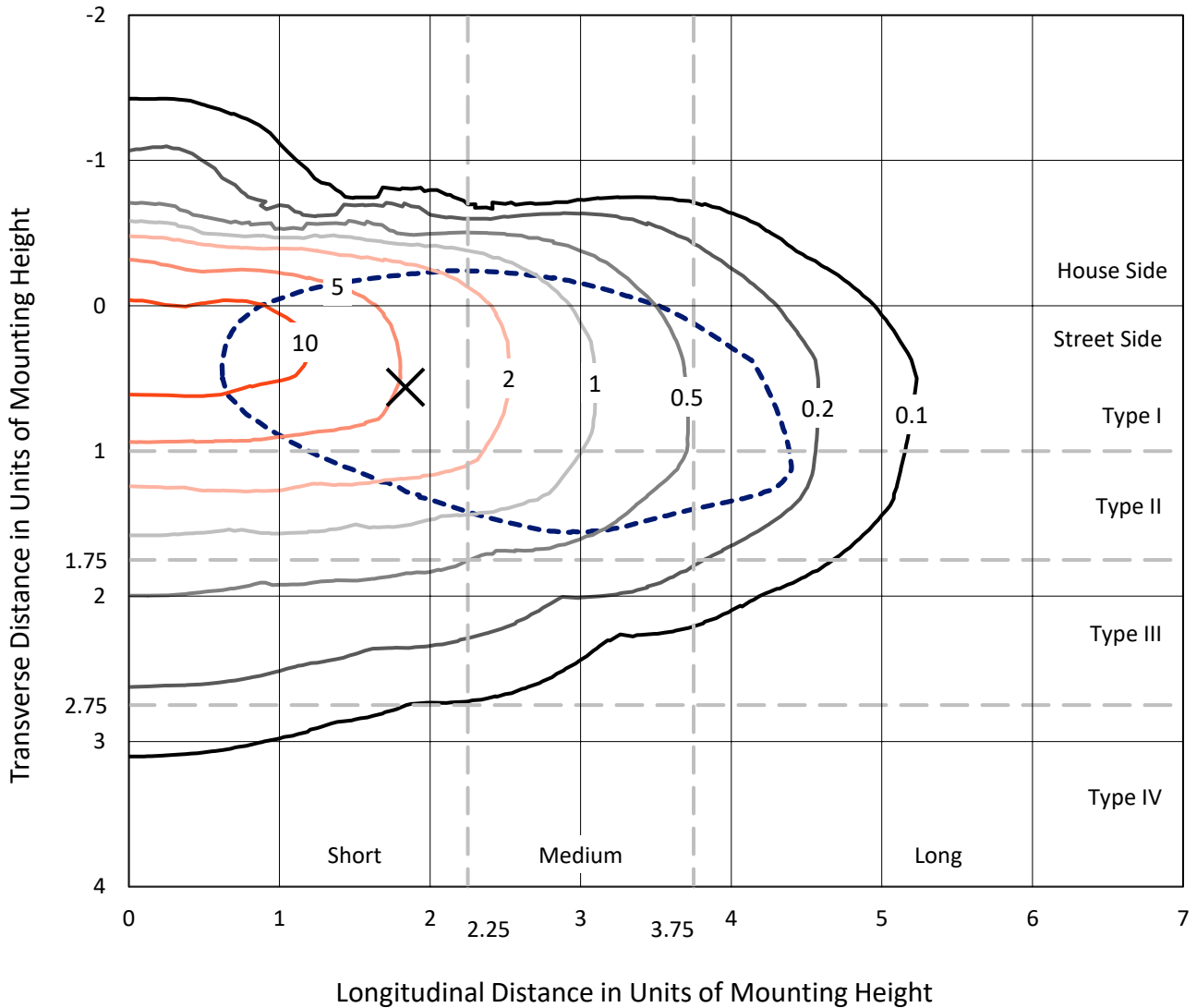
Input Watts (W): 400.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

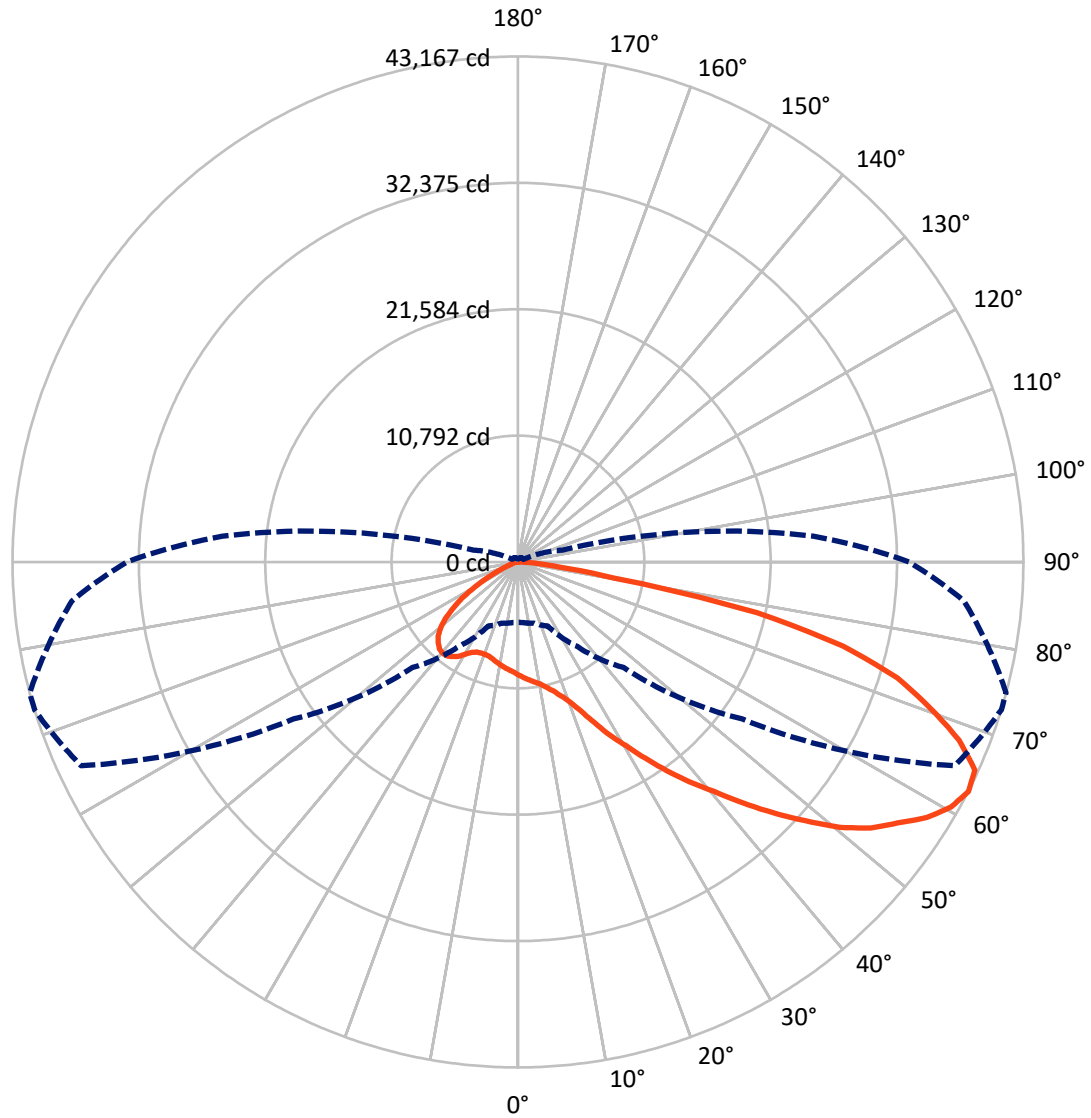
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13.4 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 73-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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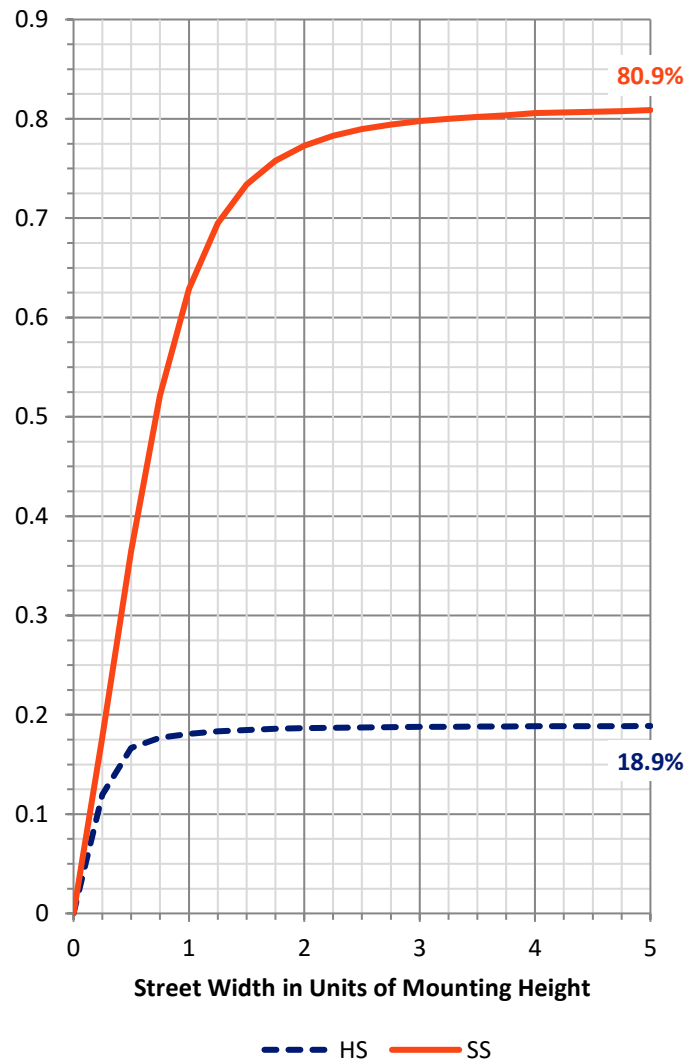
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10540.6	0.0	10540.6
	% Fixture	19.1	0.0	19.1
Street Side	Lumens	44560.4	0.0	44560.4
	% Fixture	80.9	0.0	80.9
Total	Lumens	55101.0	0.0	55101.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	923.0	1.7
10°-20°	2776.1	5.0
20°-30°	4796.6	8.7
30°-40°	7212.9	13.1
40°-50°	9617.7	17.5
50°-60°	11326.7	20.6
60°-70°	11260.8	20.4
70°-80°	6465.1	11.7
80°-90°	722.2	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°	55101.0	100.0
0°-180°	55101.0	100.0

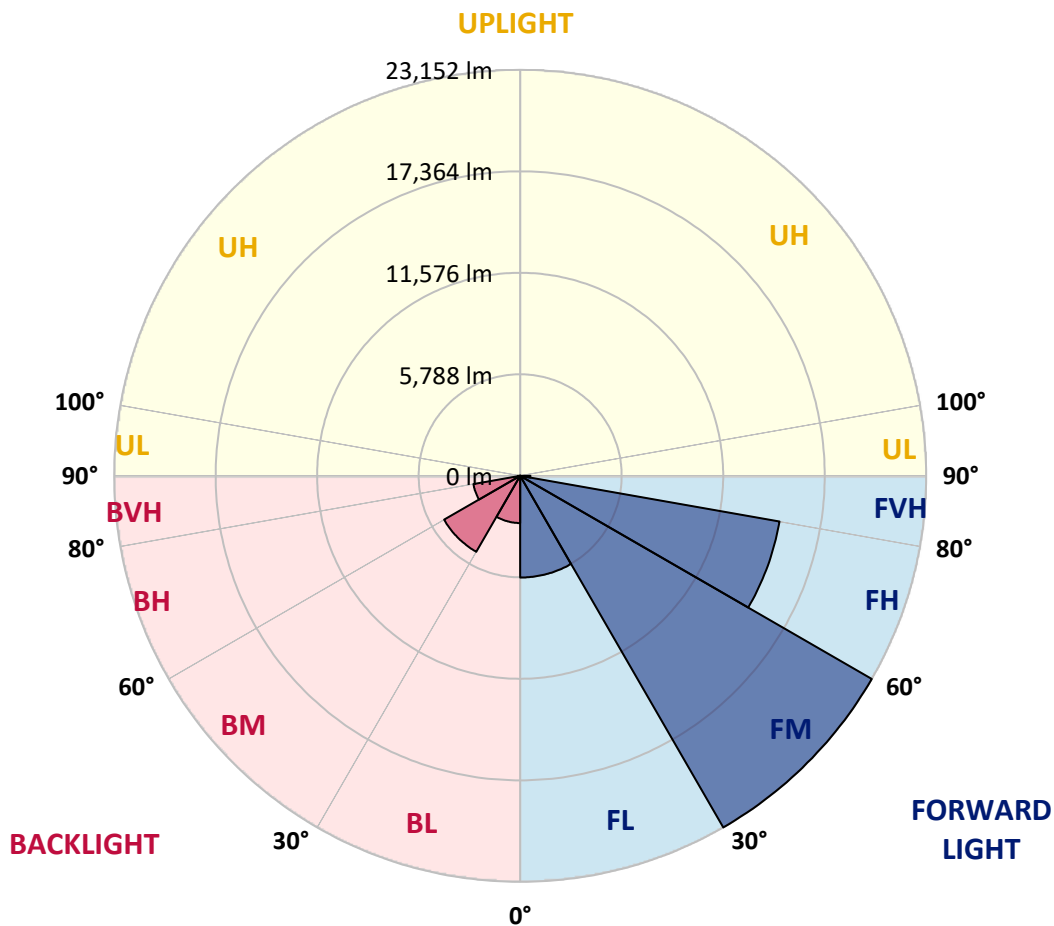


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5802.1	10.5			
FM (30°-60°)	23152.1	42.0			
FH (60°-80°)	15019.7	27.3			G5
FVH (80°-90°)	586.6	1.1			G4/750
BL (0°-30°)	2693.6	4.9	B4/5000		
BM (30°-60°)	5005.2	9.1	B4/8500		
BH (60°-80°)	2706.2	4.9	B4/5000		G4/5000
BVH (80°-90°)	135.6	0.2			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G5
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	73°	75°	85°
0°	9663.5	9663.5	9663.5	9663.5	9663.5	9663.5	9663.5	9663.5	9663.5	9663.5	9663.5
2.5°	10338.8	10364.8	10333.8	10320.2	10305.4	10208.9	10096.4	9981.3	9888.6	9873.7	9752.5
5°	11064.8	11078.4	11027.7	10969.6	10869.4	10709.8	10508.2	10309.1	10123.6	10074.1	9852.7
7.5°	11622.6	11596.6	11584.3	11534.8	11447.0	11271.4	10965.9	10639.3	10352.4	10283.1	9946.7
10°	12145.8	12134.7	12040.7	11978.8	11839.1	11677.0	11426.0	11011.6	10607.2	10495.9	10028.3
12.5°	12712.3	12687.5	12649.2	12515.6	12401.8	12128.5	11825.5	11448.2	10998.0	10849.6	10168.1
15°	13221.9	13155.1	13134.0	12994.3	12879.3	12670.2	12366.0	11928.1	11447.0	11319.6	10434.0
17.5°	13706.7	13675.8	13628.8	13533.5	13404.9	13244.1	13000.5	12531.7	12034.5	11849.0	10885.5
20°	14118.6	14080.2	14039.4	14065.4	14036.9	13934.3	13780.9	13381.4	12774.1	12594.8	11434.6
22.5°	14405.5	14404.3	14567.5	14662.8	14717.2	14713.5	14676.4	14450.0	13839.0	13657.2	12255.9
25°	14644.2	14662.8	14869.3	15231.7	15555.8	15585.5	15847.7	15740.1	15220.6	15031.4	13491.5
27.5°	14714.7	14751.8	15126.6	15696.8	16189.0	16661.5	17046.2	17242.8	16761.7	16535.4	14819.9
30°	14765.4	14780.3	15147.6	15830.4	16868.1	17616.4	18304.1	18636.8	18222.4	18056.7	16300.4
32.5°	14408.0	14412.9	14975.7	16009.7	17366.5	18664.0	19477.8	20104.9	19996.1	19777.1	17919.4
35°	13915.7	14007.3	14652.9	15836.5	17777.2	19626.2	20734.4	21669.5	21887.2	21730.1	19537.2
37.5°	13307.2	13378.9	14070.3	15579.3	17867.4	20287.9	21711.6	23260.1	23829.0	23803.1	21490.2
40°	12558.9	12646.7	13474.2	15025.2	17822.9	20769.1	22858.1	25021.4	25743.7	25662.0	23427.1
42.5°	11674.6	11803.2	12605.9	14312.8	17497.6	21063.5	23796.9	26814.8	28114.7	28061.5	25141.3
45°	10800.1	10869.4	11601.6	13320.8	16899.0	21158.7	24680.0	29286.0	30546.3	30487.0	27206.9
47.5°	9898.5	9959.1	10723.4	12275.7	15860.0	20967.0	25378.8	31408.4	33023.7	32964.4	29258.8
50°	7800.8	8029.6	9596.7	11356.7	14676.4	20424.0	26038.0	34052.8	35616.2	35363.8	31055.9
52.5°	6674.0	6756.9	7569.5	10430.3	13495.2	19497.6	26478.4	36503.0	37748.5	37384.8	32893.9
55°	6238.6	6294.3	6692.6	8722.2	12385.8	18096.3	26996.6	38959.3	39347.7	39254.9	34392.9
57.5°	5908.4	5970.2	6254.7	7285.0	11216.9	16132.2	26834.6	40687.2	41173.3	40876.5	35984.7
60°	5440.9	5516.3	5893.6	6540.4	9888.6	14138.4	25408.5	41394.7	42500.4	42166.5	37195.6
62.5°	5146.5	5196.0	5412.4	6039.5	8787.8	12735.8	23378.8	41167.1	43167.1	43154.7	38245.7
65°	4747.0	4820.0	5051.3	5559.6	7808.2	11648.6	21464.2	40042.8	42880.1	42891.3	38462.1
67.5°	4329.0	4358.6	4601.1	5009.2	6654.2	10652.9	18986.8	38119.5	40645.2	40900.0	36964.3
70°	3807.0	3792.2	4054.4	4352.5	5438.4	9045.0	15282.4	34698.4	37342.8	37447.9	33935.3
72.5°	2995.6	3009.2	3082.2	3288.8	4128.6	7118.0	11089.5	29315.7	33890.8	34077.5	30064.0
75°	2013.6	2035.8	2376.0	2577.6	2969.7	5115.6	6973.3	19788.3	28650.3	29177.1	24605.8
77.5°	1536.2	1549.8	1648.7	1868.9	2148.4	3646.2	3779.8	10782.8	20858.1	22108.6	19249.0
80°	1088.4	1093.4	995.7	885.6	1144.1	2473.7	2232.5	4592.4	8311.6	9821.8	11306.0
82.5°	487.3	479.9	565.2	470.0	659.2	957.3	1053.8	2228.8	3452.0	3710.5	4039.5
85°	226.3	253.6	290.7	243.7	392.1	369.8	410.6	949.9	1617.8	1786.0	1776.1
87.5°	55.7	60.6	76.7	97.7	142.2	126.2	123.7	279.5	361.2	359.9	552.9
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°	9663.5	9663.5	9663.5	9663.5	9663.5	9663.5	9663.5	9663.5	9663.5	9663.5	9663.5
2.5°	9669.6	9605.3	9453.2	9306.0	9166.2	9073.5	8969.6	8860.7	8795.2	8764.3	8831.1
5°	9717.9	9595.4	9304.8	9012.9	8765.5	8554.0	8405.6	8279.4	8211.4	8217.6	8221.3
7.5°	9758.7	9586.8	9179.9	8768.0	8382.1	8119.9	7925.7	7789.6	7711.7	7652.4	7696.9
10°	9794.6	9550.9	9033.9	8484.7	8065.5	7677.1	7413.6	7249.1	7105.7	7025.3	7088.4
12.5°	9832.9	9537.3	8870.6	8231.2	7688.2	7254.1	6892.9	6729.7	6588.7	6528.1	6566.4
15°	9999.9	9589.3	8718.5	7933.1	7315.9	6754.4	6364.8	6164.4	6053.1	5980.1	5996.2
17.5°	10286.8	9726.5	8620.8	7621.4	6900.4	6306.7	5802.0	5568.3	5384.0	5332.0	5318.4
20°	10695.0	9987.5	8620.8	7358.0	6429.1	5809.5	5228.1	4833.6	4546.6	4439.0	4521.9
22.5°	11380.2	10431.5	8706.1	7119.3	6023.4	5293.7	4601.1	3998.7	3611.6	3454.5	3546.0
25°	12338.8	11118.0	8844.7	6910.2	5653.6	4700.0	3805.8	3113.1	2686.4	2499.7	2497.2
27.5°	13590.4	12168.1	9124.2	6739.6	5210.8	3931.9	2975.8	2309.2	1908.5	1795.9	1812.0
30°	14978.2	13306.0	9652.3	6492.2	4672.8	3072.3	2167.0	1696.9	1414.9	1266.5	1269.0
32.5°	16316.4	14484.7	10279.4	6331.4	3974.0	2316.6	1544.8	1210.9	1035.2	947.4	961.0
35°	17751.2	15501.4	10745.7	6061.8	3154.0	1674.7	1092.1	907.8	834.9	789.1	791.6
37.5°	19300.9	16619.5	11129.1	5700.6	2384.6	1150.3	806.4	778.0	747.1	688.9	684.0
40°	20920.0	17914.4	11357.9	5116.8	1657.4	796.5	685.2	717.4	700.1	624.6	618.4
42.5°	22292.9	18913.8	11414.8	4343.8	1072.3	645.6	620.9	670.4	674.1	597.4	587.5
45°	23611.3	19804.3	11303.5	3325.9	743.3	607.3	581.3	649.3	654.3	585.0	568.9
47.5°	25086.9	21022.6	11101.9	2218.9	614.7	573.9	567.7	614.7	632.0	575.1	555.3
50°	26879.1	22013.3	10504.5	1363.0	580.1	552.9	552.9	581.3	604.8	555.3	545.4
52.5°	28717.0	22876.7	9620.2	935.1	559.1	530.6	546.7	559.1	567.7	523.2	531.8
55°	30034.3	23642.3	8301.7	752.0	546.7	515.8	554.1	529.4	517.0	478.7	470.0
57.5°	31496.2	24552.6	6953.5	666.7	530.6	524.4	529.4	482.4	447.7	408.2	399.5
60°	32516.6	25042.4	5303.6	627.1	512.1	515.8	488.6	425.5	362.4	333.9	327.8
62.5°	33407.2	25321.9	3887.4	576.4	494.7	493.5	442.8	363.6	298.1	267.2	262.2
65°	33272.3	24885.3	2519.5	535.6	481.1	465.1	397.0	311.7	248.6	225.1	222.6
67.5°	31789.4	22953.3	1586.9	493.5	457.6	429.2	356.2	278.3	228.8	201.6	199.1
70°	28676.2	20285.5	970.9	439.1	406.9	379.7	315.4	261.0	216.4	184.3	178.1
72.5°	24373.2	17373.9	686.4	387.1	355.0	322.8	267.2	248.6	206.6	165.7	160.8
75°	20024.5	12797.6	575.1	337.7	303.0	259.7	227.6	231.3	194.2	150.9	147.2
77.5°	14101.3	7978.9	535.6	275.8	238.7	206.6	196.7	211.5	178.1	138.5	134.8
80°	8230.0	4481.1	442.8	217.7	179.3	159.6	164.5	179.3	155.8	124.9	120.0
82.5°	3322.2	1773.6	311.7	169.4	131.1	127.4	134.8	145.9	128.6	105.1	102.7
85°	1186.1	554.1	176.9	111.3	84.1	87.8	86.6	103.9	92.8	76.7	75.4
87.5°	311.7	110.1	79.2	44.5	35.9	35.9	33.4	48.2	44.5	34.6	38.3
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)