

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: P510838

Luminaire Tested: **CST-CA8-480-730-U-T3-HSS**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510838
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-16)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA8-480-730-U-T3-HSS
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 65080 lumens
Efficiency: N/A
Efficacy: 135.4 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

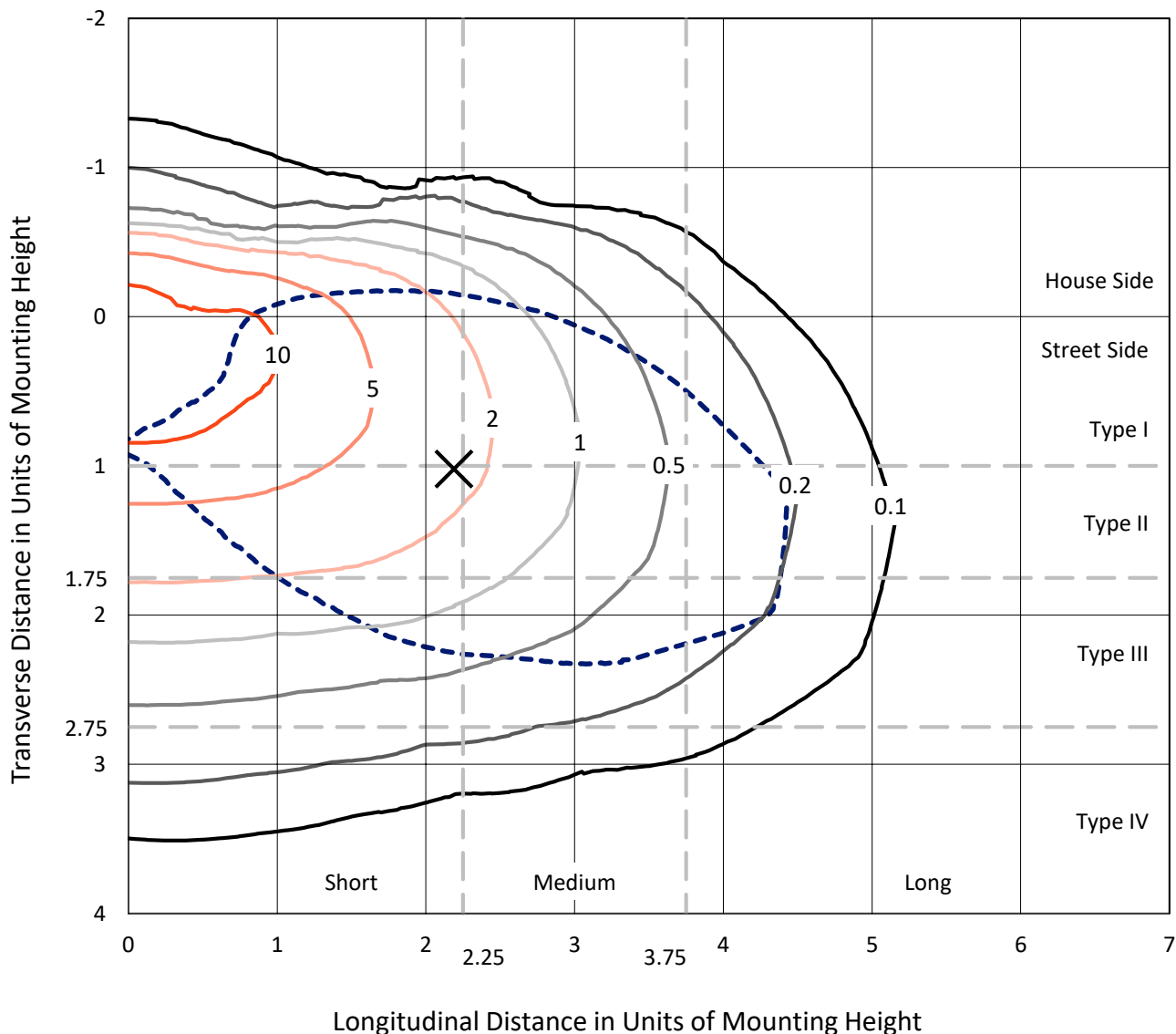
Input Watts (W): 480.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

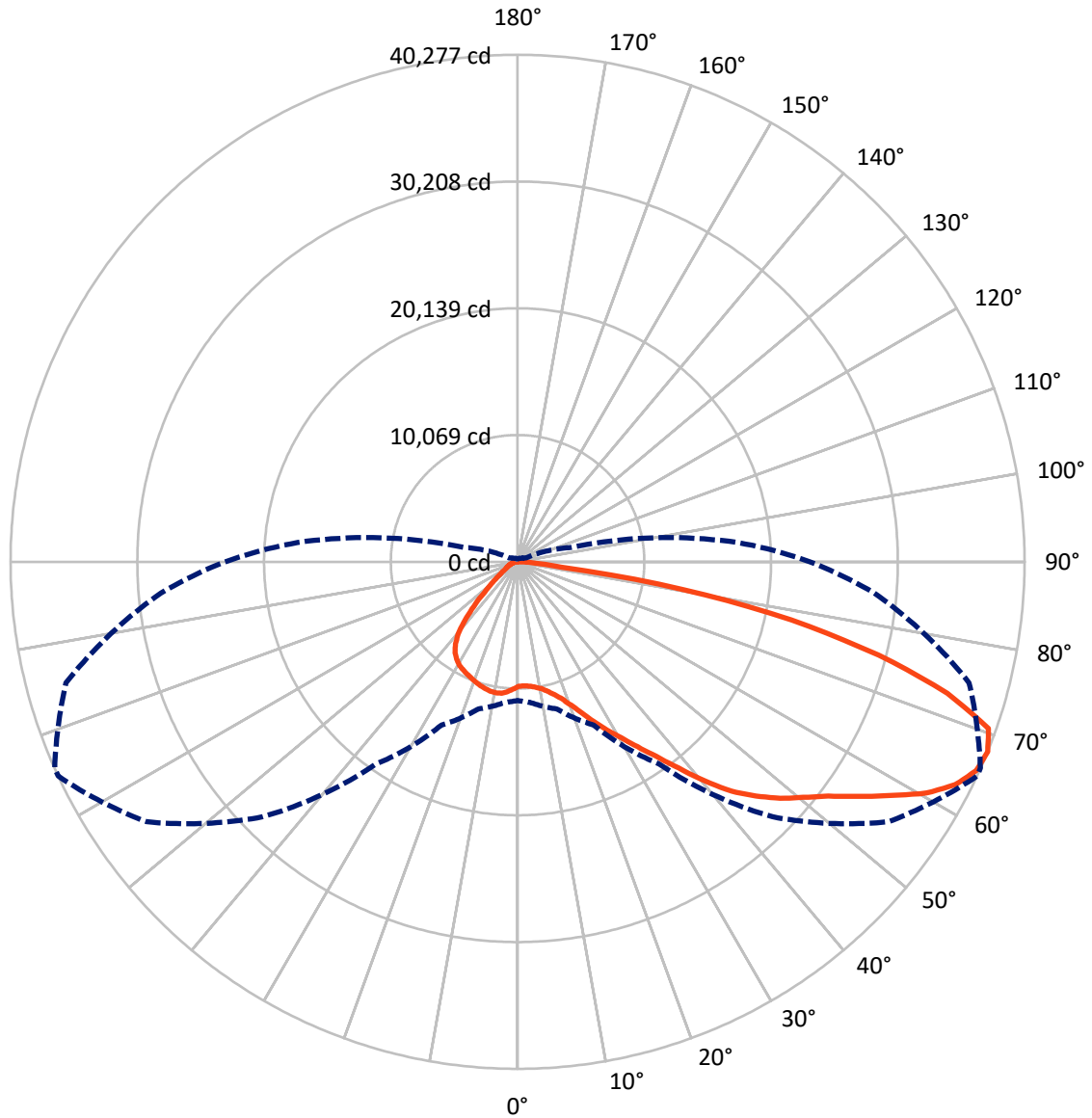
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 12.9 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 65-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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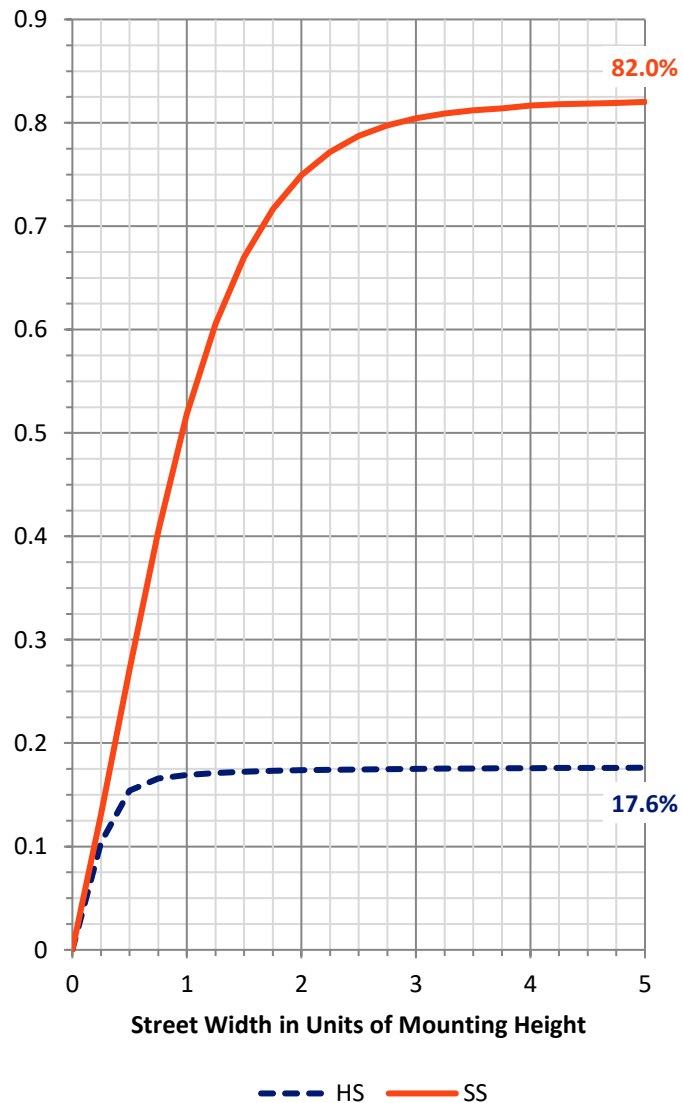
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	11631.4	0.0	11631.4
	% Fixture	17.9	0.0	17.9
Street Side	Lumens	53448.6	0.0	53448.6
	% Fixture	82.1	0.0	82.1
Total	Lumens	65080.0	0.0	65080.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	978.4	1.5
10°-20°	3020.6	4.6
20°-30°	5240.2	8.1
30°-40°	7904.7	12.1
40°-50°	10960.4	16.8
50°-60°	13529.2	20.8
60°-70°	14415.2	22.1
70°-80°	8248.6	12.7
80°-90°	782.6	1.2
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°	65080.0	100.0
0°-180°	65080.0	100.0

Coefficient of Utilization

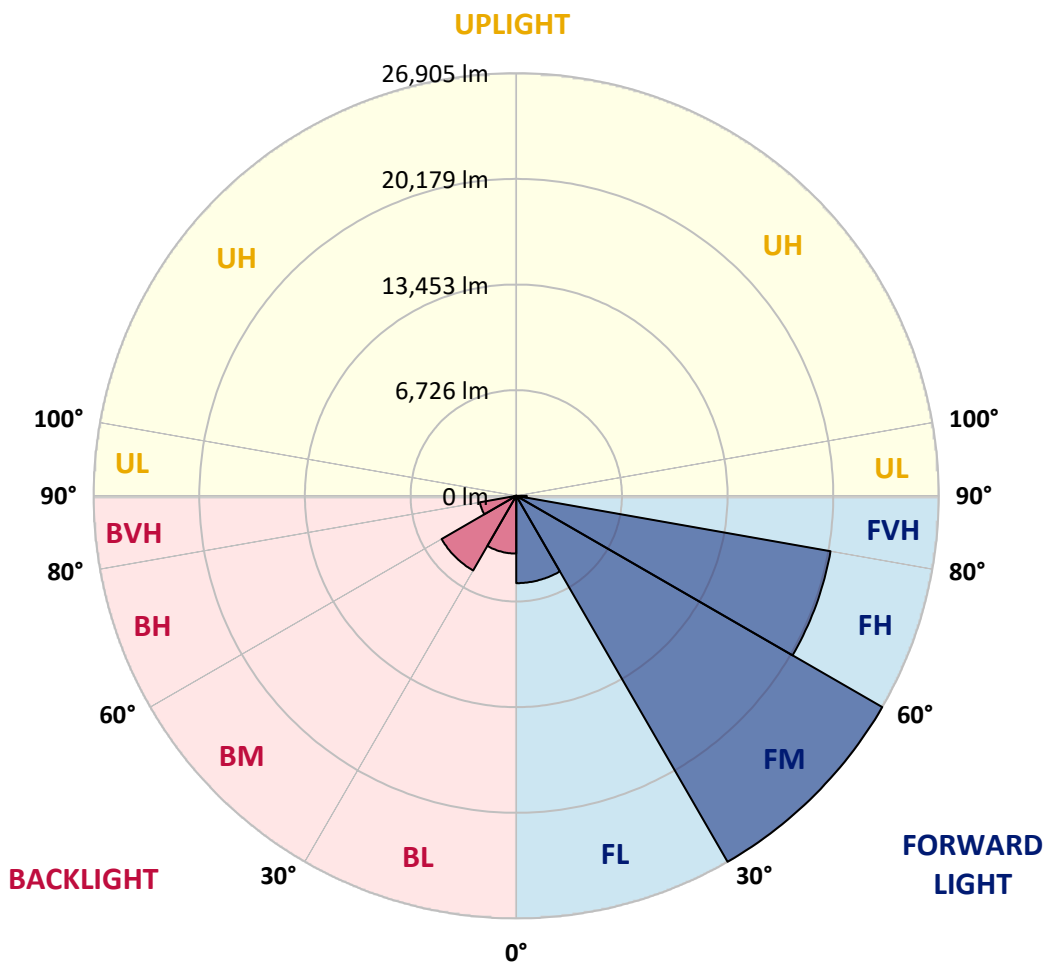


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	5558.7	8.5			
FM (30°-60°)	26905.0	41.3			
FH (60°-80°)	20316.2	31.2			G5
FVH (80°-90°)	668.7	1.0			G4/750
BL (0°-30°)	3680.5	5.7	B4/5000		
BM (30°-60°)	5489.4	8.4	B4/8500		
BH (60°-80°)	2347.6	3.6	B3/2500		G3/2500
BVH (80°-90°)	113.9	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 III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	9889.3	9889.3	9889.3	9889.3	9889.3	9889.3	9889.3	9889.3	9889.3	9889.3	9889.3
2.5°	9793.8	9781.0	9769.6	9789.5	9800.9	9819.5	9846.6	9865.1	9870.8	9887.9	9909.3
5°	9950.6	9949.2	9933.5	9925.0	9900.7	9892.2	9897.9	9920.7	9922.1	9943.5	10010.5
7.5°	10258.6	10255.7	10217.2	10200.1	10148.8	10091.8	10049.0	10053.3	10051.8	10073.2	10163.0
10°	10723.3	10700.5	10646.3	10593.6	10493.8	10386.9	10308.5	10237.2	10237.2	10268.5	10368.3
12.5°	11247.9	11279.3	11205.2	11125.3	10958.5	10766.1	10629.2	10549.4	10540.8	10556.5	10627.8
15°	11899.4	11899.4	11849.5	11735.5	11588.6	11320.6	11038.4	10937.1	10922.9	10955.7	10951.4
17.5°	12633.6	12655.0	12560.9	12503.9	12278.6	11982.1	11628.6	11453.2	11453.2	11431.8	11333.5
20°	13570.2	13453.3	13463.3	13369.2	13203.8	12773.3	12414.1	12158.9	12156.0	12113.3	11836.7
22.5°	14588.1	14523.9	14468.3	14385.6	14157.6	13772.6	13273.7	13021.4	13015.7	12910.2	12499.6
25°	15591.7	15640.2	15578.9	15427.8	15261.0	14841.8	14291.6	14043.5	14042.1	13866.7	13285.1
27.5°	16623.8	16676.6	16656.6	16519.8	16297.4	15969.5	15449.1	15125.5	15105.6	14991.5	14260.2
30°	17764.3	17717.3	17778.6	17720.1	17608.9	17074.3	16603.9	16227.5	16276.0	16241.8	15367.9
32.5°	18594.0	18623.9	18824.9	18830.6	18713.7	18317.4	17742.9	17512.0	17589.0	17543.3	16729.3
35°	19343.9	19392.3	19651.8	19907.0	19992.5	19559.1	18974.6	18960.4	19060.2	19338.2	18605.4
37.5°	19988.2	20022.4	20386.0	20718.1	20994.7	20698.2	20273.3	20779.4	20926.3	21495.1	20541.4
40°	20374.6	20418.8	20889.2	21356.8	21850.0	21744.6	21704.6	22902.1	23040.4	23540.8	21954.1
42.5°	20156.4	20243.4	21027.5	21882.8	22608.5	22819.4	23365.5	24905.1	25063.3	25106.1	23342.6
45°	19767.3	19875.6	20752.3	22136.6	23319.8	23997.0	25036.2	26537.4	26624.4	26503.2	24493.1
47.5°	19348.1	19463.6	20443.0	22061.0	23891.5	25367.0	26528.8	28074.2	28135.5	27763.4	25652.1
50°	18872.0	18978.9	20032.4	21884.3	24322.0	26660.0	28062.8	29402.8	29632.4	28896.7	26553.1
52.5°	18293.2	18407.2	19524.9	21607.7	24699.8	27619.4	29415.7	30904.0	30919.7	30313.8	27568.1
55°	17543.3	17741.5	18887.7	21128.7	24898.0	28443.4	30594.6	32889.8	32991.0	32405.1	28417.7
57.5°	16709.4	16881.9	18120.7	20490.0	24719.8	29069.2	32490.7	35019.7	35006.8	33830.7	29160.5
60°	15607.4	15730.0	17121.4	19654.6	24145.2	29826.2	34465.1	37302.0	37279.2	35227.8	29638.1
62.5°	14193.2	14315.8	15624.5	18344.5	23301.3	30333.7	35805.2	39011.3	38945.7	36244.2	29784.9
65°	12553.8	12773.3	13909.5	16643.8	21808.7	30000.2	36452.4	40017.8	39912.3	37019.8	29434.2
67.5°	11017.0	11203.7	12103.3	14303.0	19606.2	28647.3	35996.2	40277.2	40245.9	37132.4	28443.4
70°	8841.5	8909.9	9733.9	11617.1	16313.0	25750.5	34419.5	39678.5	39692.8	36094.6	26453.3
72.5°	6051.6	6218.4	6584.8	8071.7	11870.9	20478.6	29666.6	35709.7	35712.5	32365.2	23047.5
75°	3254.6	3512.7	3940.3	4677.4	6636.1	13141.1	23824.5	29630.9	29686.5	26985.0	18318.9
77.5°	1613.8	1706.4	1954.5	2501.9	3042.2	6199.9	15322.3	22242.1	22374.7	20713.8	12493.9
80°	738.5	754.1	772.7	768.4	1164.7	2720.0	6577.7	13357.8	13397.7	12320.0	5703.8
82.5°	577.4	574.5	583.1	530.3	533.2	1049.2	2276.7	3498.4	3730.8	2936.7	1809.1
85°	349.3	347.8	374.9	290.8	357.8	567.4	1149.0	1395.7	1412.8	1149.0	936.6
87.5°	132.6	128.3	118.3	104.1	119.7	159.7	397.7	513.2	501.8	356.4	323.6
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°	9889.3	9889.3	9889.3	9889.3	9889.3	9889.3	9889.3	9889.3	9889.3	9889.3	9889.3
2.5°	9927.8	9973.4	10057.6	10121.7	10143.1	10211.5	10277.1	10288.5	10335.5	10354.1	10415.4
5°	10051.8	10128.8	10260.0	10346.9	10385.4	10499.5	10573.6	10610.7	10597.8	10605.0	10673.4
7.5°	10232.9	10305.6	10411.1	10516.6	10535.1	10555.1	10548.0	10542.3	10492.4	10449.6	10513.7
10°	10398.3	10466.7	10532.3	10548.0	10453.9	10401.1	10307.0	10234.3	10137.4	10093.2	10144.5
12.5°	10630.6	10644.9	10580.7	10495.2	10292.8	10104.6	9952.1	9819.5	9699.7	9617.0	9685.5
15°	10875.8	10820.2	10633.5	10384.0	10070.4	9800.9	9551.5	9330.5	9132.3	9083.9	9102.4
17.5°	11200.9	11049.8	10673.4	10254.3	9766.7	9347.6	9026.8	8747.4	8488.0	8379.6	8369.6
20°	11597.2	11353.4	10754.7	10090.3	9407.5	8850.1	8354.0	7936.3	7578.4	7284.8	7291.9
22.5°	12113.3	11759.7	10877.3	9919.3	9009.7	8267.0	7545.7	6835.7	6246.9	5993.2	5930.5
25°	12794.7	12267.2	11051.2	9763.9	8565.0	7525.7	6506.4	5504.2	4881.2	4634.6	4607.5
27.5°	13642.9	12948.7	11316.3	9591.4	8088.8	6646.1	5180.6	4198.4	3626.7	3367.2	3280.3
30°	14606.6	13788.3	11588.6	9411.8	7512.9	5515.6	3950.3	2988.0	2402.1	2169.8	2139.8
32.5°	15854.0	14851.8	11993.5	9129.5	6671.8	4335.2	2755.7	1864.7	1466.9	1367.1	1338.6
35°	17626.0	16290.2	12493.9	8773.1	5591.2	3028.0	1707.9	1092.0	879.6	829.7	819.7
37.5°	19278.3	17701.6	12998.5	8181.5	4245.4	1890.3	976.5	700.0	652.9	654.3	657.2
40°	20588.4	18666.7	13406.3	7403.1	2792.7	1073.5	678.6	581.6	583.1	578.8	575.9
42.5°	21754.5	19436.5	13590.2	6252.6	1618.0	718.5	588.8	536.0	523.2	527.5	524.6
45°	22719.7	20222.0	13233.8	4959.6	953.7	644.4	556.0	497.5	483.3	506.1	508.9
47.5°	23734.7	20967.6	12687.8	3736.5	774.1	613.0	526.0	469.0	461.9	490.4	493.3
50°	24588.6	21507.9	11756.9	2815.5	738.5	578.8	499.0	440.5	439.1	464.7	464.7
52.5°	25302.8	21834.4	10652.0	2174.0	714.2	548.9	471.9	413.4	413.4	422.0	423.4
55°	25806.1	21768.8	9993.4	1710.7	688.6	520.3	443.4	387.8	370.7	365.0	367.8
57.5°	25897.3	21594.9	9229.3	1334.4	658.6	493.3	417.7	357.8	326.5	322.2	320.8
60°	25838.9	21212.8	8356.8	1114.8	624.4	467.6	392.0	326.5	295.1	285.1	288.0
62.5°	25595.1	20535.7	7348.9	978.0	590.2	447.6	363.5	305.1	276.6	263.7	263.7
65°	24859.5	19566.2	5852.1	856.8	547.4	426.3	340.7	296.5	265.2	250.9	248.1
67.5°	23242.8	17554.7	4398.0	751.3	506.1	403.4	337.9	295.1	259.5	239.5	236.6
70°	21074.5	15079.9	3002.3	660.0	460.5	382.1	336.4	296.5	253.8	228.1	225.2
72.5°	17593.2	11888.0	1729.2	574.5	414.8	362.1	330.7	297.9	243.8	212.4	208.1
75°	13219.5	8338.3	1015.0	493.3	370.7	332.2	315.1	289.4	228.1	193.9	189.6
77.5°	7950.5	3893.3	764.1	409.1	317.9	292.2	280.8	265.2	208.1	179.6	175.3
80°	2916.8	1478.3	600.2	327.9	252.3	253.8	242.4	232.4	189.6	165.4	162.5
82.5°	1271.6	903.8	443.4	249.5	198.2	226.7	199.6	191.0	162.5	148.3	142.6
85°	771.2	538.9	285.1	169.6	136.9	154.0	139.7	146.8	125.5	116.9	112.6
87.5°	255.2	161.1	126.9	82.7	68.4	64.2	62.7	75.6	71.3	65.6	65.6
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)