

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: P510479

Luminaire Tested: **CST-CA10-310-730-U-T3**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510479
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-11)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: CST-CA10-310-730-U-T3
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (10) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 47672 lumens
Efficiency: N/A
Efficacy: 152.6 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B4 - U0 - G5

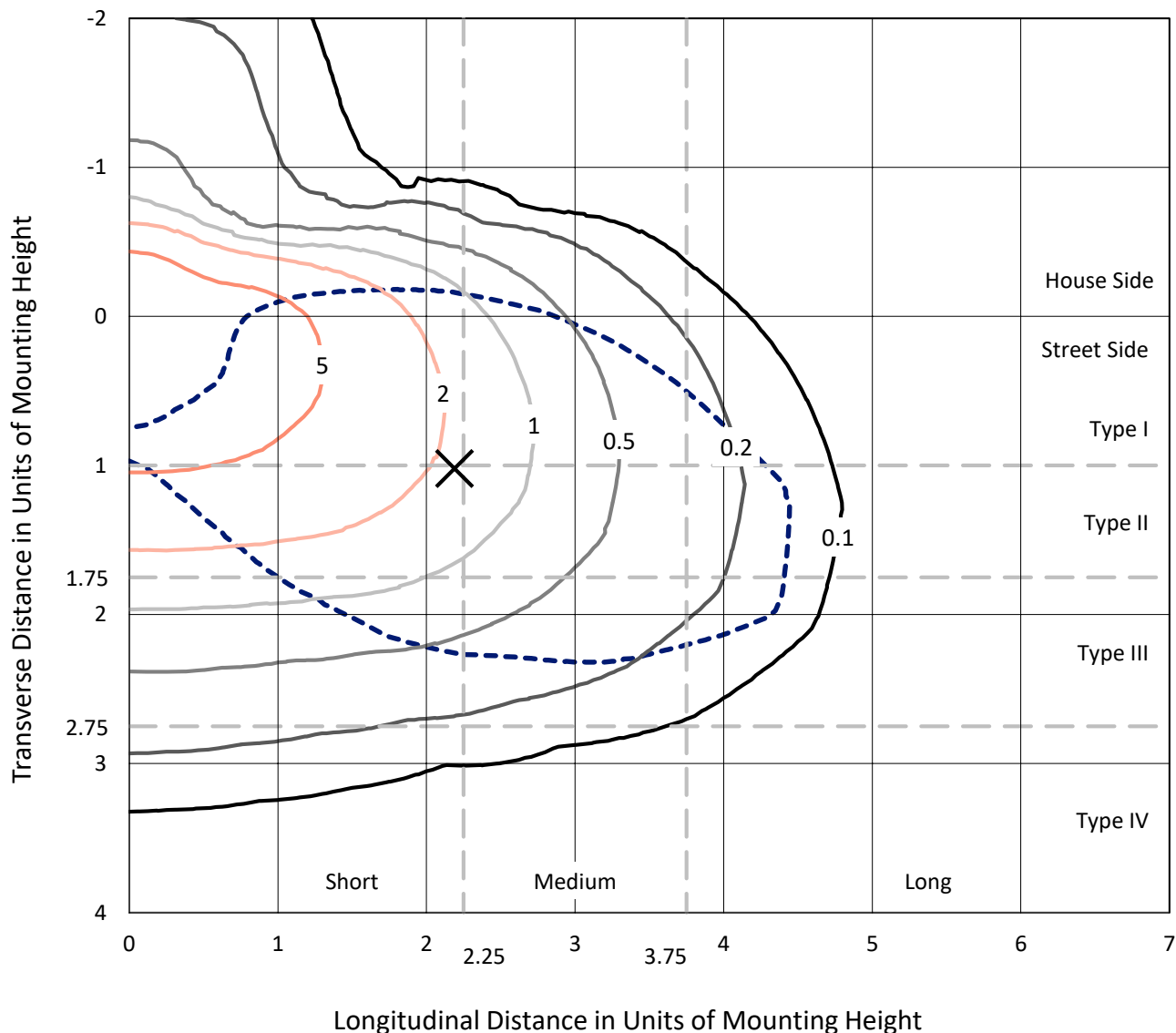
Input Watts (W): 312.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



REPORT NUMBER: P510479
 CATALOG NUMBER: CST-CA10-310-730-U-T3

Iso-Footcandle Lines of Horizontal Illumination

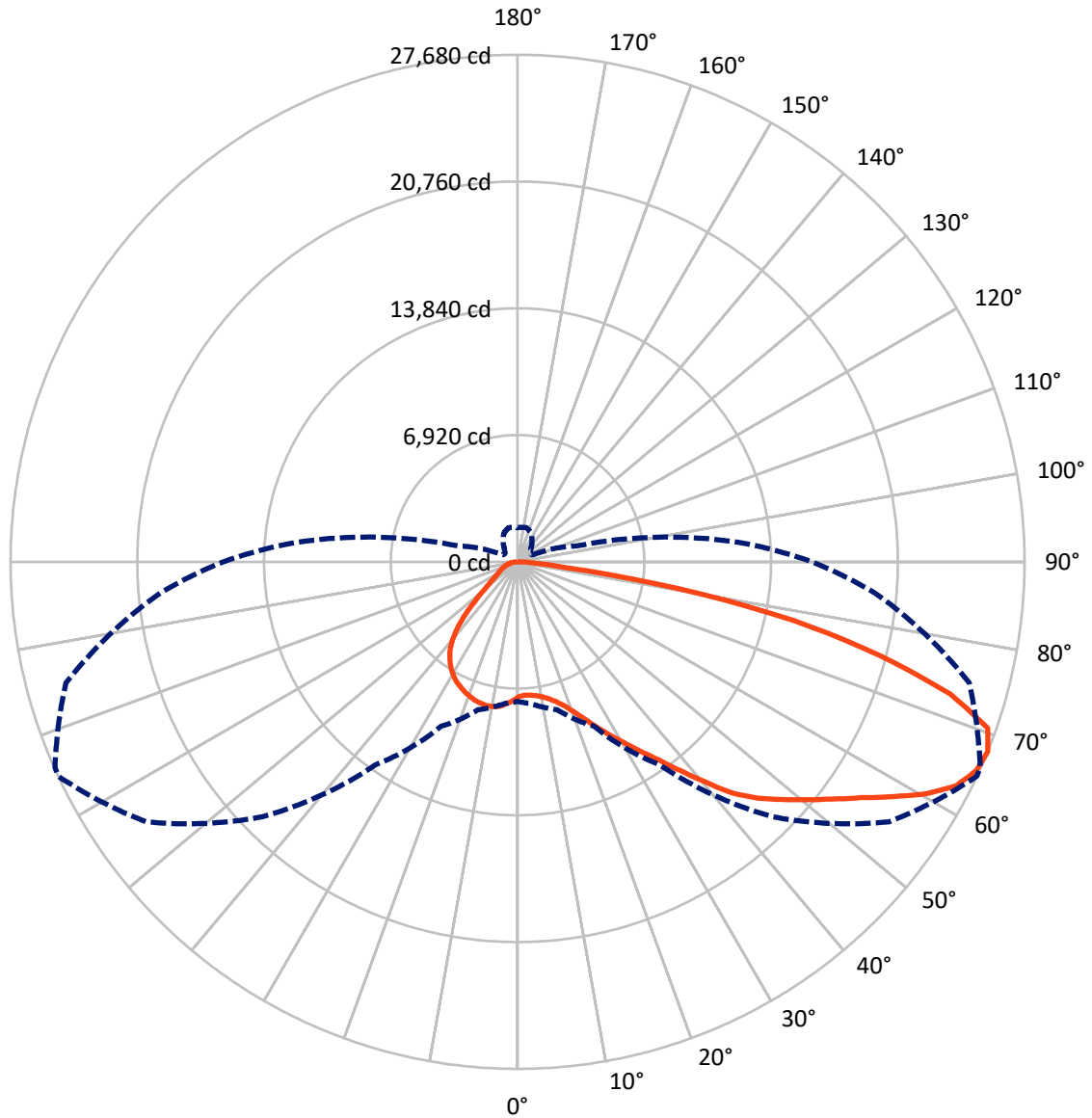
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 9.1 fc
 Type III - Short - N/A

REPORT NUMBER: P510479
CATALOG NUMBER: CST-CA10-310-730-U-T3

Luminous Intensity Polar Plot



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

REPORT NUMBER: P510479
 CATALOG NUMBER: CST-CA10-310-730-U-T3

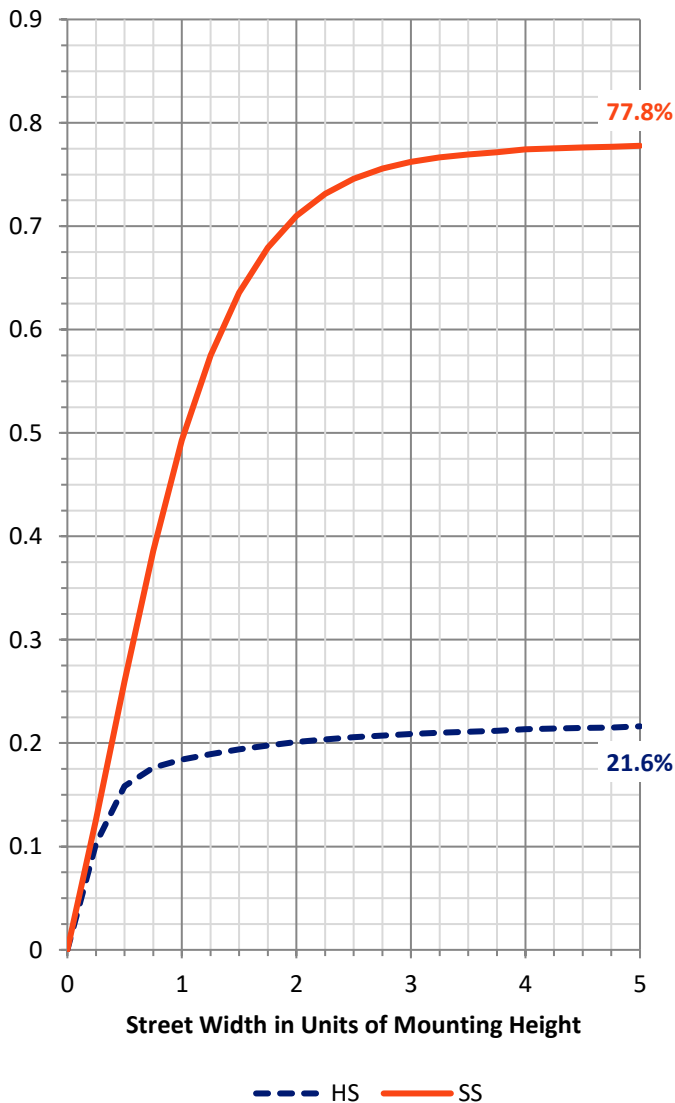
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	10530.2	0.0	10530.2
	% Fixture	22.1	0.0	22.1
Street Side	Lumens	37141.9	0.0	37141.9
	% Fixture	77.9	0.0	77.9
Total	Lumens	47672.0	0.0	47672.0
	% Fixture	100.0	0.0	100.0

Coefficient of Utilization

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	733.7	1.5
10°-20°	2292.2	4.8
20°-30°	3968.1	8.3
30°-40°	5830.7	12.2
40°-50°	7881.0	16.5
50°-60°	9691.2	20.3
60°-70°	10384.8	21.8
70°-80°	6124.8	12.8
80°-90°	765.6	1.6
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°	47672.0	100.0
0°-180°	47672.0	100.0

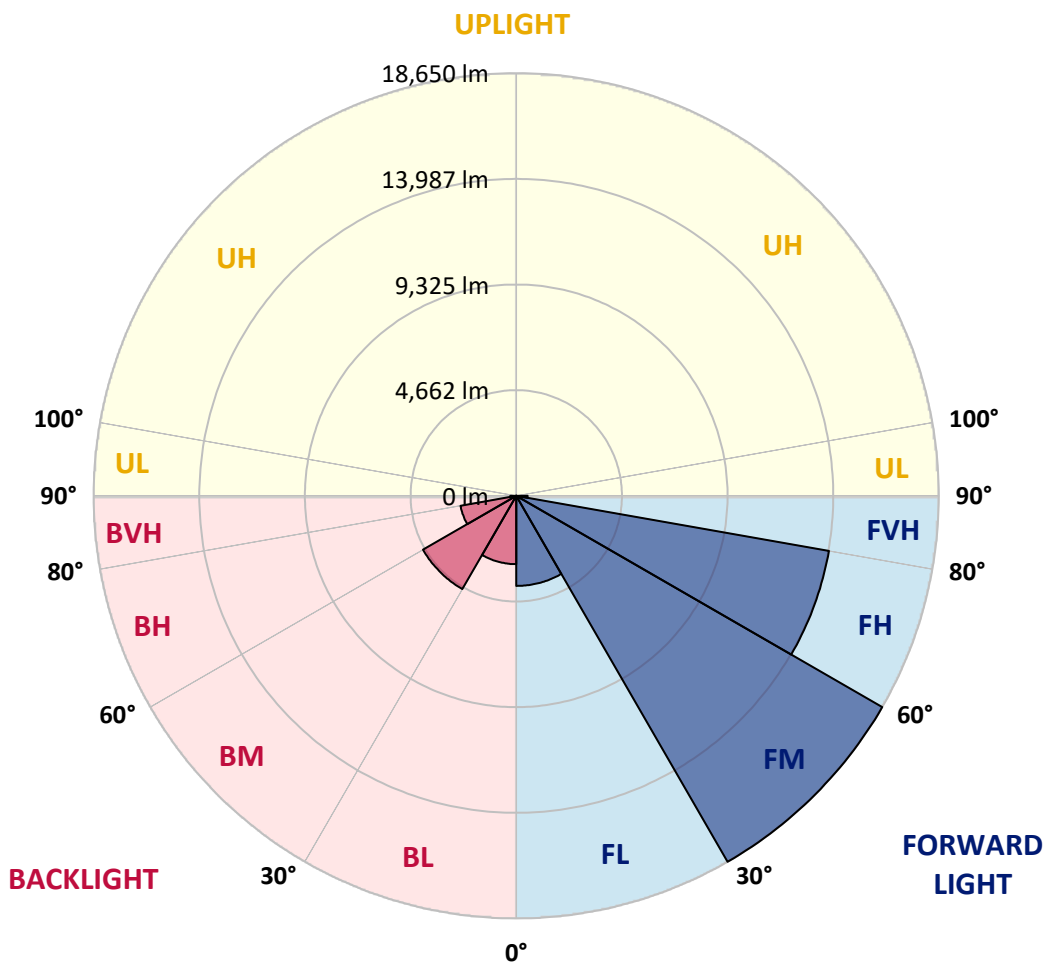


REPORT NUMBER: P510479
 CATALOG NUMBER: CST-CA10-310-730-U-T3

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	3977.8	8.3			
FM (30°-60°)	18649.6	39.1			
FH (60°-80°)	14012.4	29.4			G5
FVH (80°-90°)	502.0	1.1			G4/750
BL (0°-30°)	3016.1	6.3	B4/5000		
BM (30°-60°)	4753.3	10.0	B3/5000		
BH (60°-80°)	2497.2	5.2	B3/2500		G3/2500
BVH (80°-90°)	263.6	0.6			G3/500
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





REPORT NUMBER: P510479

CATALOG NUMBER: CST-CA10-310-730-U-T3

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	7363.5	7363.5	7363.5	7363.5	7363.5	7363.5	7363.5	7363.5	7363.5	7363.5	7363.5
2.5°	7224.5	7210.9	7205.1	7223.6	7237.2	7252.7	7275.1	7296.5	7299.4	7327.6	7364.5
5°	7312.0	7300.3	7287.7	7284.8	7279.9	7279.0	7284.8	7309.1	7314.9	7342.1	7421.8
7.5°	7506.4	7494.7	7471.4	7462.7	7436.4	7389.8	7367.4	7380.0	7383.0	7416.0	7515.1
10°	7823.3	7787.3	7759.1	7729.9	7647.3	7573.5	7519.0	7495.7	7490.8	7522.9	7637.6
12.5°	8201.3	8171.2	8140.1	8063.3	7958.4	7825.2	7729.0	7675.5	7671.6	7698.8	7785.3
15°	8600.8	8600.8	8579.4	8488.1	8385.0	8164.4	8015.7	7926.3	7932.1	7953.5	7993.3
17.5°	9116.9	9074.2	9064.4	8960.4	8845.7	8644.6	8408.4	8265.5	8272.3	8282.0	8251.9
20°	9641.8	9629.1	9614.6	9545.6	9441.6	9183.0	8917.7	8730.1	8731.1	8696.1	8561.9
22.5°	10335.7	10294.0	10304.6	10226.9	10086.0	9820.6	9515.4	9292.8	9307.4	9256.9	9013.9
25°	11024.9	10983.1	10960.7	10908.2	10786.7	10535.0	10172.5	9968.4	9950.9	9859.5	9506.7
27.5°	11713.0	11688.7	11707.2	11644.0	11544.9	11264.0	10931.6	10705.1	10716.8	10653.6	10127.8
30°	12425.4	12398.2	12478.9	12376.9	12315.6	12042.5	11723.7	11457.4	11467.1	11490.4	10900.5
32.5°	12962.9	12995.0	13135.9	13124.3	13112.6	12808.4	12473.1	12325.3	12339.9	12421.6	11818.0
35°	13482.0	13484.9	13683.2	13832.8	13896.0	13641.4	13293.4	13288.5	13383.8	13632.6	13097.1
37.5°	13912.5	13902.8	14167.2	14399.5	14572.5	14375.2	14183.7	14482.1	14568.6	15084.7	14384.9
40°	14147.7	14168.2	14508.3	14798.0	15138.2	15044.9	15065.3	15828.3	16041.1	16493.1	15348.1
42.5°	13982.5	14044.7	14574.4	15165.4	15678.6	15803.0	16213.1	17282.3	17372.7	17454.3	16295.8
45°	13705.5	13770.6	14357.7	15312.1	16124.7	16650.5	17355.2	18401.0	18500.2	18408.8	17084.0
47.5°	13416.8	13483.9	14138.0	15252.9	16494.0	17502.0	18370.9	19390.5	19516.8	19234.0	17842.1
50°	13050.4	13154.4	13869.8	15127.5	16793.4	18420.5	19332.1	20409.1	20467.4	20059.2	18416.6
52.5°	12599.4	12714.1	13487.8	14912.7	17027.6	19061.9	20305.1	21514.2	21508.4	21023.3	19073.6
55°	12125.1	12229.1	13026.1	14574.4	17158.9	19555.7	21082.6	22732.0	22802.0	22395.7	19668.4
57.5°	11517.6	11611.9	12480.8	14119.6	17022.8	19974.6	22342.3	24179.3	24214.3	23351.2	20141.8
60°	10712.9	10851.9	11724.7	13541.3	16632.1	20459.6	23730.2	25701.4	25744.1	24291.1	20446.0
62.5°	9829.4	9884.8	10774.1	12650.9	16063.5	20833.8	24692.5	26892.0	26829.8	25025.8	20537.4
65°	8752.4	8796.2	9566.0	11506.0	15007.0	20628.7	25037.5	27504.3	27427.5	25487.5	20256.5
67.5°	7625.0	7760.1	8364.6	9917.8	13532.5	19682.1	24745.9	27680.3	27641.4	25522.5	19585.8
70°	6161.2	6208.8	6755.1	8079.8	11291.2	17786.7	23774.0	27229.3	27199.1	24741.1	18216.3
72.5°	4344.6	4298.0	4563.3	5602.3	8155.7	14148.7	20298.3	24695.4	24745.9	22132.3	15863.2
75°	2306.4	2395.9	2808.9	3430.0	4623.6	9095.5	16183.0	20438.2	20420.7	18507.0	12539.2
77.5°	1228.5	1226.6	1510.4	1775.8	2263.7	4179.4	10674.0	15413.2	15498.8	14339.2	8609.6
80°	590.0	612.3	629.8	722.2	1128.4	1931.3	4465.2	8938.1	9521.3	8552.2	4090.0
82.5°	472.4	474.3	476.3	455.8	466.5	786.3	1720.4	2586.4	2679.7	2153.8	1318.9
85°	349.9	328.5	325.6	276.0	312.0	472.4	868.0	1104.1	1049.7	1021.5	744.5
87.5°	140.9	132.2	128.3	120.5	120.5	177.9	306.2	399.5	398.5	363.5	249.8
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P510479
 CATALOG NUMBER: CST-CA10-310-730-U-T3

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	7363.5	7363.5	7363.5	7363.5	7363.5	7363.5	7363.5	7363.5	7363.5	7363.5	7363.5
2.5°	7393.6	7428.6	7510.3	7580.3	7606.5	7670.7	7730.9	7765.9	7790.2	7804.8	7870.9
5°	7470.4	7540.4	7670.7	7768.8	7864.1	7982.7	8059.4	8108.0	8135.2	8150.8	8198.4
7.5°	7588.0	7659.0	7797.0	7947.7	8035.1	8132.3	8181.9	8216.9	8234.4	8229.5	8267.4
10°	7693.0	7763.0	7901.0	8016.7	8066.2	8121.6	8147.9	8155.7	8156.6	8160.5	8198.4
12.5°	7835.9	7878.7	7952.5	8028.3	8017.6	8019.6	8041.9	8032.2	8009.9	8006.0	8031.2
15°	7989.5	7990.4	7996.3	7979.7	7912.7	7883.5	7852.4	7826.2	7764.9	7761.0	7800.9
17.5°	8181.9	8136.2	8030.3	7917.5	7758.1	7648.3	7537.5	7491.8	7417.0	7402.4	7421.8
20°	8429.7	8334.5	8076.9	7797.0	7498.6	7302.3	7168.2	7033.1	6929.1	6903.8	6922.3
22.5°	8785.5	8597.9	8136.2	7668.7	7207.0	6871.7	6611.2	6448.9	6274.0	6184.5	6193.3
25°	9215.1	8921.6	8239.2	7506.4	6863.9	6379.9	5957.1	5631.5	5434.2	5303.0	5338.0
27.5°	9777.8	9374.5	8362.7	7346.0	6437.2	5751.0	5137.7	4696.5	4495.3	4433.1	4392.3
30°	10430.0	9921.7	8492.9	7108.9	5976.5	4972.5	4187.2	3819.8	3589.4	3552.5	3521.4
32.5°	11302.8	10610.8	8736.9	6851.3	5426.4	4194.0	3341.6	2918.8	2866.3	2836.2	2829.4
35°	12428.4	11513.8	8992.5	6516.9	4709.1	3281.3	2528.1	2299.6	2274.4	2307.4	2310.3
37.5°	13622.9	12493.5	9298.7	6139.8	3883.9	2448.3	1934.2	1775.8	1803.9	1907.0	1930.3
40°	14431.6	13138.9	9576.7	5627.6	2864.3	1778.7	1407.4	1373.4	1528.9	1661.1	1688.3
42.5°	15207.2	13627.8	9689.4	4950.2	2043.0	1266.5	1136.2	1252.8	1470.6	1615.4	1634.8
45°	15869.1	14196.3	9405.6	4137.6	1385.0	1058.5	1088.6	1249.9	1491.9	1652.3	1666.9
47.5°	16498.9	14660.9	9017.8	3259.9	1092.5	1018.6	1087.6	1276.2	1539.6	1691.2	1699.9
50°	17100.5	15014.7	8355.9	2480.4	1023.5	1000.1	1096.4	1317.0	1565.8	1661.1	1657.2
52.5°	17546.7	15197.5	7651.2	2002.2	996.3	985.6	1119.7	1368.5	1570.7	1628.0	1624.1
55°	17874.2	15162.5	7188.6	1639.7	973.9	979.7	1157.6	1407.4	1617.3	1703.8	1700.9
57.5°	17904.3	15004.0	6662.7	1385.0	946.7	978.8	1198.4	1461.8	1850.6	2010.0	1961.4
60°	17868.4	14741.6	6137.9	1215.9	916.6	984.6	1241.2	1625.1	2186.9	2312.3	2278.3
62.5°	17691.5	14252.7	5351.6	1104.1	890.3	1006.0	1273.3	1754.4	2170.4	2185.0	2136.4
65°	17145.3	13598.6	4319.4	991.4	864.1	1020.6	1299.5	1788.4	1993.5	1946.8	1922.5
67.5°	16064.4	12137.8	3331.9	888.4	830.0	1017.6	1377.3	1739.8	1926.4	1892.4	1861.3
70°	14528.8	10477.7	2313.2	782.4	772.7	999.2	1357.8	1756.3	1894.3	1841.9	1800.1
72.5°	12137.8	8219.8	1471.5	695.9	687.2	955.4	1309.2	1745.6	1873.0	1849.6	1792.3
75°	9139.3	5737.4	935.0	601.6	611.4	875.7	1231.5	1688.3	1862.3	1789.4	1679.5
77.5°	5754.0	2832.3	727.0	511.2	525.8	755.2	1064.3	1474.5	1787.4	1743.7	1602.8
80°	2176.2	1149.8	568.6	415.0	427.7	587.1	872.8	1213.0	1645.5	1717.4	1657.2
82.5°	1002.1	719.2	426.7	333.4	338.2	427.7	651.2	898.1	1392.8	1576.5	1727.2
85°	585.1	471.4	284.8	222.6	231.3	252.7	366.4	548.2	902.9	1202.3	1345.2
87.5°	199.3	164.3	110.8	94.3	91.4	104.0	88.4	179.8	268.3	472.4	539.4
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)