

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: McGRAW-EDISON

Report Number: P591338

Luminaire Tested: **CTN-CA6-230-730-U-T2-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591338
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-5)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA6-230-730-U-T2-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (6) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20720 lumens
Efficiency: N/A
Efficacy: 91.0 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type II - Short
BUG Rating: B3 - U0 - G3

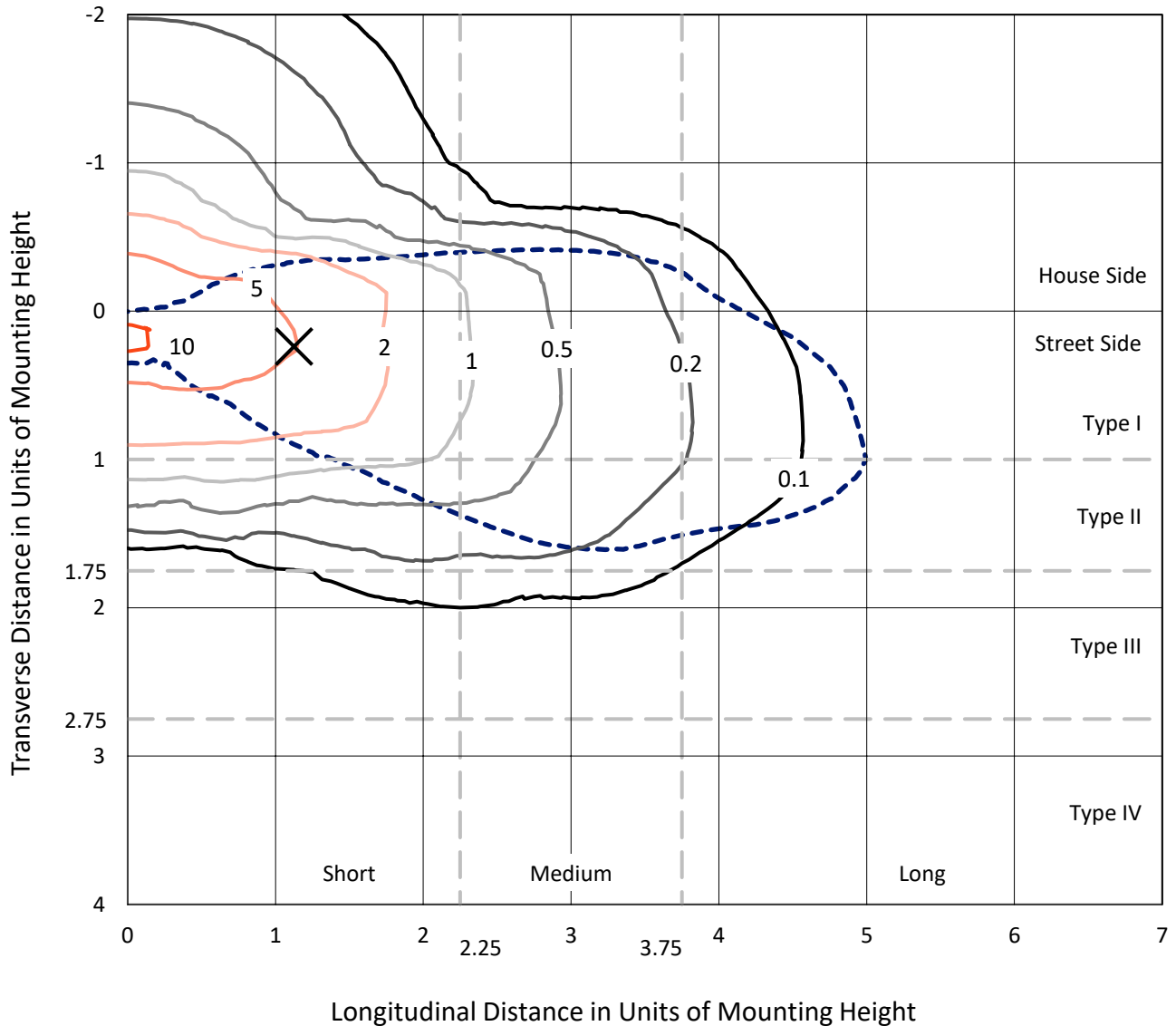
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

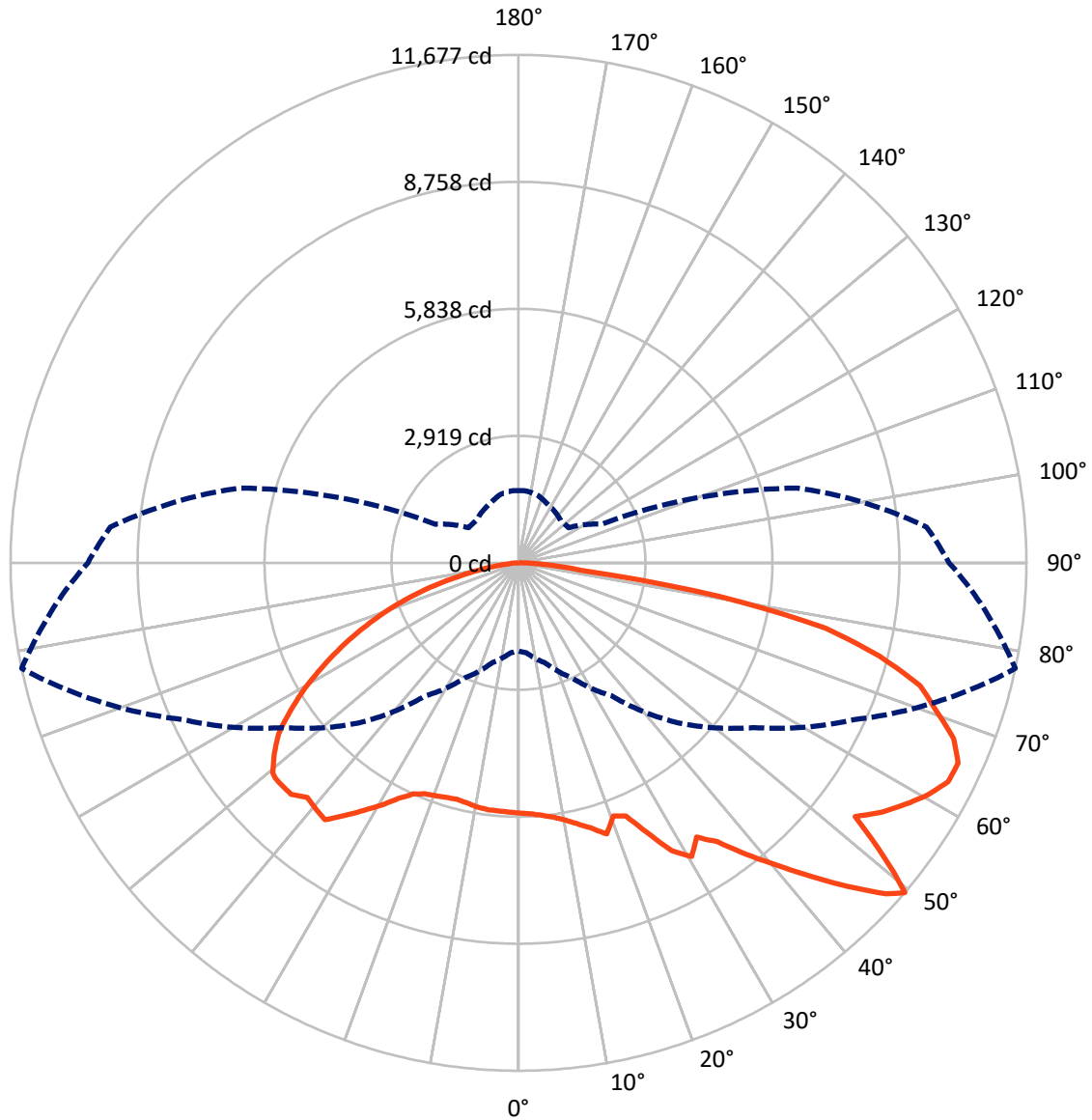
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 10.5 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 78-Deg Lateral - - - Horizontal Cone Through 49-Deg Vertical

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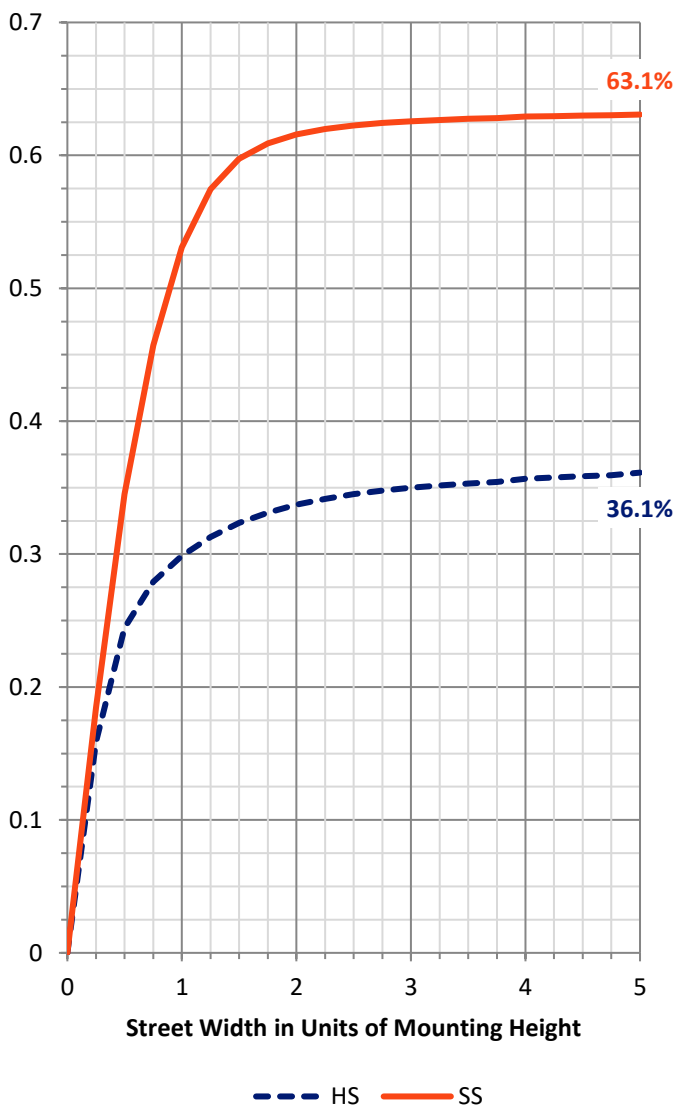
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7671.9	0.0	7671.9
	% Fixture	37.0	0.0	37.0
Street Side	Lumens	13048.1	0.0	13048.1
	% Fixture	63.0	0.0	63.0
Total	Lumens	20720.0	0.0	20720.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	557.7	2.7
10°-20°	1641.3	7.9
20°-30°	2343.0	11.3
30°-40°	3016.2	14.6
40°-50°	3538.0	17.1
50°-60°	3649.9	17.6
60°-70°	3314.1	16.0
70°-80°	2200.9	10.6
80°-90°	458.9	2.2
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°	20720.0	100.0
0°-180°	20720.0	100.0

Coefficient of Utilization

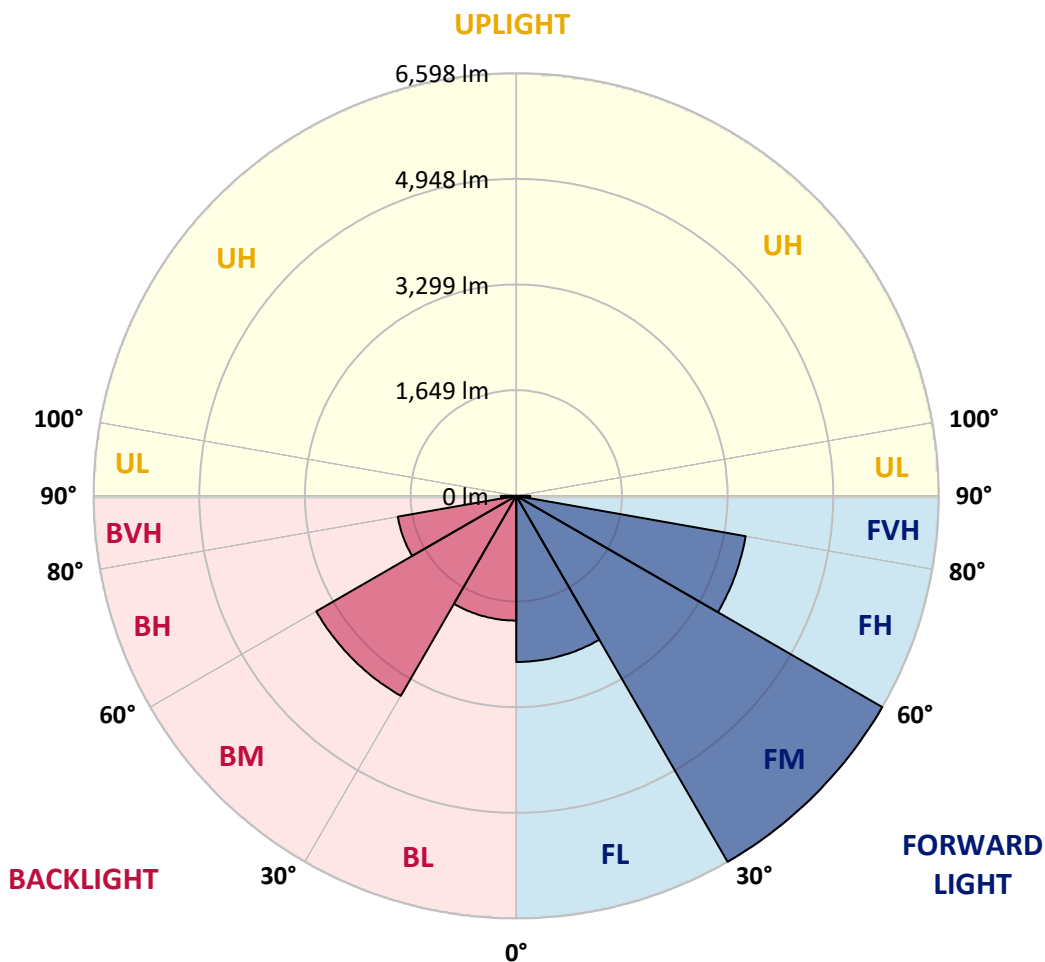


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2594.4	12.5			
FM (30°-60°)	6597.9	31.8			
FH (60°-80°)	3637.1	17.6			G2/5000
FVH (80°-90°)	218.7	1.1			G2/225
BL (0°-30°)	1947.6	9.4	B3/2500		
BM (30°-60°)	3606.2	17.4	B3/5000		
BH (60°-80°)	1877.9	9.1	B3/2500		G3/2500
BVH (80°-90°)	240.2	1.2			G3/500
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 Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	78°	85°
0°	5753.7	5753.7	5753.7	5753.7	5753.7	5753.7	5753.7	5753.7	5753.7	5753.7	5753.7
2.5°	5989.0	5943.0	5957.6	5982.7	5868.7	5893.8	5844.7	5864.6	5803.9	5780.9	5791.4
5°	6412.4	6363.3	6381.1	6389.4	6224.2	6157.3	6003.6	5971.2	5876.1	5834.2	5830.1
7.5°	6621.6	6568.2	6572.4	6577.6	6445.9	6455.3	6316.2	6150.0	5973.3	5909.5	5881.3
10°	6965.5	6891.3	6866.2	6855.8	6678.0	6603.8	6482.5	6391.5	6115.5	6019.3	5947.2
12.5°	7177.8	7123.4	7123.4	7113.0	6924.8	6867.3	6650.8	6554.6	6282.8	6168.8	6044.4
15°	7216.5	7179.9	7226.9	7217.5	7094.1	7027.2	6931.0	6730.3	6452.2	6334.0	6187.6
17.5°	6779.4	6682.2	6496.1	6524.3	6525.4	6661.3	6595.4	6733.4	6651.9	6555.7	6397.8
20°	5567.6	5601.1	5899.1	5826.9	5799.7	6088.3	6383.2	6391.5	6229.5	6213.8	6427.1
22.5°	4850.4	4731.2	5062.6	5544.6	5574.9	5960.8	6304.7	6718.8	6459.5	6320.4	6157.3
25°	4131.0	4174.9	4674.7	5298.9	5740.1	5825.9	6221.1	6881.9	6992.7	6864.1	6523.3
27.5°	4006.6	4004.5	4222.0	4914.1	5819.6	6141.6	6272.3	6789.9	7562.6	7490.4	7059.6
30°	3979.4	3962.7	4076.6	4651.7	5450.5	6426.0	6674.9	6859.9	7517.6	7838.6	7659.8
32.5°	3860.2	3845.6	3966.9	4268.0	5154.6	6634.1	7058.6	7334.6	7364.9	7516.6	8293.4
35°	3673.1	3684.6	3852.9	4180.2	4727.0	6134.3	7451.7	7868.9	7978.7	7874.1	7981.8
37.5°	3481.7	3494.3	3659.5	4030.6	4652.8	5925.2	7705.8	8385.4	8613.3	8501.5	8003.8
40°	3244.4	3264.2	3455.6	3872.8	4567.0	5453.7	7184.1	8972.0	9281.5	9135.1	8580.9
42.5°	2974.6	2983.0	3200.5	3632.3	4458.3	5481.9	6645.6	9513.6	9929.7	9849.2	9149.7
45°	2740.4	2740.4	2938.0	3322.8	4210.5	5428.6	6417.7	9110.0	10725.4	10611.4	9719.6
47.5°	2421.5	2449.8	2681.9	3063.5	3918.8	5305.2	6548.4	8203.5	11466.7	11371.5	10291.5
49°	2028.4	2076.5	2382.8	2921.3	3731.6	5202.7	6600.6	8523.4	10955.4	11676.8	10662.7
50°	1867.4	1892.5	1895.6	2819.9	3592.6	5109.7	6624.7	8769.1	10092.8	11184.4	10923.0
52.5°	1616.4	1458.6	1296.5	2538.6	3313.4	4765.7	6639.3	9436.2	9885.8	9690.3	10720.2
55°	682.8	894.0	1136.5	2076.5	3012.3	4340.1	6591.2	10169.1	10340.6	10125.2	9191.5
57.5°	516.5	550.0	610.6	1611.2	2158.0	3855.0	6429.2	10633.4	10724.3	10479.7	9564.8
60°	75.3	77.4	108.7	653.5	1235.9	2751.9	5845.7	10619.8	11009.8	10821.6	9886.8
62.5°	31.4	32.4	41.8	535.3	952.5	2118.3	5336.6	10442.0	11286.9	11085.1	10189.0
65°	5.2	6.3	17.8	473.6	787.3	1979.3	4778.2	10477.6	11188.6	11104.9	10306.1
67.5°	4.2	5.2	16.7	425.5	649.3	1812.0	4227.2	9911.9	10829.9	10793.3	9993.5
70°	4.2	5.2	17.8	384.8	561.5	1596.6	3546.5	9128.8	10172.3	10186.9	9468.6
72.5°	5.2	5.2	17.8	344.0	488.3	1364.5	2806.3	8083.2	9575.3	9655.8	8722.1
75°	5.2	5.2	16.7	299.0	419.3	1137.6	2021.1	5944.0	8587.2	8563.2	7649.3
77.5°	5.2	5.2	16.7	237.3	348.2	935.8	1316.4	3347.9	7110.9	7212.3	6395.7
80°	5.2	5.2	16.7	173.6	272.9	701.6	797.8	1713.7	3796.4	4699.8	4399.7
82.5°	5.2	5.2	16.7	117.1	187.2	404.6	460.0	867.8	1363.4	1494.1	1748.2
85°	4.2	4.2	12.5	70.1	96.2	143.2	221.7	462.1	745.5	778.9	760.1
87.5°	2.1	2.1	6.3	25.1	41.8	52.3	99.3	186.1	273.9	280.2	243.6
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°	5753.7	5753.7	5753.7	5753.7	5753.7	5753.7	5753.7	5753.7	5753.7	5753.7	5753.7
2.5°	5791.4	5757.9	5727.6	5732.8	5668.0	5649.2	5577.0	5614.7	5578.1	5545.7	5576.0
5°	5800.8	5760.0	5704.6	5651.3	5502.8	5433.8	5347.0	5369.0	5319.8	5281.1	5314.6
7.5°	5828.0	5777.8	5692.0	5540.4	5363.7	5254.0	5155.7	5251.9	5240.4	5211.1	5245.6
10°	5840.5	5797.6	5650.2	5472.5	5225.7	5156.7	5067.8	5066.8	5069.9	5075.2	5109.7
12.5°	5874.0	5809.1	5576.0	5369.0	5140.0	4999.9	4935.1	4987.3	4893.2	4837.8	4861.9
15°	5953.4	5835.3	5525.8	5223.6	5007.2	4891.1	4684.1	4701.9	4682.0	4627.7	4651.7
17.5°	6110.3	5908.5	5523.7	5131.6	4837.8	4648.6	4467.7	4382.0	4354.8	4359.0	4379.9
20°	6302.7	6038.1	5527.9	5013.5	4661.1	4441.6	4162.4	4102.8	4012.9	4015.0	4020.2
22.5°	6180.3	6187.6	5530.0	4878.6	4440.5	4165.5	3869.6	3752.5	3683.5	3665.7	3691.9
25°	6511.8	6478.3	5562.4	4806.5	4208.4	3839.3	3529.8	3380.3	3276.8	3268.4	3297.7
27.5°	6953.0	6892.4	5729.7	4650.7	3962.7	3448.3	3112.6	2999.7	2910.8	2879.5	2900.4
30°	7489.4	7418.3	5960.8	4529.4	3631.2	3028.0	2740.4	2663.0	2575.2	2517.7	2522.9
32.5°	8049.8	7898.2	6198.1	4426.9	3291.4	2659.9	2414.2	2345.2	2241.7	2167.5	2185.2
35°	8614.4	8399.0	6462.6	4246.0	2876.3	2335.8	2137.1	2044.1	1959.4	1892.5	1881.0
37.5°	8167.9	8984.5	6718.8	4077.7	2551.2	2089.0	1864.2	1798.4	1748.2	1695.9	1694.9
40°	8204.5	8391.7	6870.4	3779.7	2188.4	1836.0	1610.2	1633.2	1654.1	1614.3	1614.3
42.5°	8567.3	8300.7	6809.8	3384.5	1918.6	1583.0	1479.5	1572.5	1638.4	1610.2	1609.1
45°	9078.6	8732.5	6913.3	2939.1	1656.2	1427.2	1442.9	1556.8	1642.6	1637.4	1635.3
47.5°	9621.3	9224.0	6714.6	2410.0	1475.3	1379.1	1442.9	1533.8	1636.3	1660.4	1655.1
49°	9900.4	9418.4	6635.1	2101.6	1403.1	1372.8	1445.0	1515.0	1624.8	1661.4	1656.2
50°	10070.9	9523.0	6532.7	1925.9	1364.5	1373.9	1449.2	1503.5	1614.3	1655.1	1652.0
52.5°	10454.6	9681.9	6024.5	1620.6	1301.7	1377.0	1476.3	1492.0	1575.7	1619.6	1642.6
55°	10063.5	10044.7	5376.3	1480.5	1268.3	1369.7	1487.8	1502.5	1543.3	1567.3	1585.1
57.5°	10002.9	10202.6	4559.7	1405.2	1239.0	1359.2	1474.2	1501.4	1525.5	1521.3	1514.0
60°	10195.3	10340.6	3718.0	1331.0	1205.5	1342.5	1429.3	1469.0	1476.3	1465.9	1449.2
62.5°	10225.6	10378.3	2857.5	1255.7	1168.9	1301.7	1363.4	1403.1	1403.1	1377.0	1370.7
65°	10084.5	10143.0	2105.8	1168.9	1125.0	1254.7	1286.0	1315.3	1328.9	1294.4	1296.5
67.5°	9679.8	9341.1	1598.7	1065.4	1071.7	1189.9	1211.8	1231.7	1234.8	1214.9	1212.9
70°	8866.4	8444.0	1142.8	908.6	974.5	1087.4	1120.8	1151.2	1140.7	1106.2	1101.0
72.5°	7639.9	7264.6	776.9	727.7	857.4	989.1	1010.0	1011.1	990.1	1015.2	1033.0
75°	6572.4	5674.3	579.2	580.3	686.9	853.2	918.0	923.2	932.6	1070.7	1098.9
77.5°	5222.6	3697.1	493.5	458.0	527.0	709.9	812.4	850.0	1128.2	1223.3	1210.8
80°	3207.8	2219.7	382.7	362.8	428.7	545.8	698.4	868.9	1151.2	1082.2	1045.6
82.5°	1502.5	1013.2	276.0	278.1	318.9	398.4	552.1	1011.1	994.3	820.8	810.3
85°	581.3	350.3	167.3	189.2	214.3	269.8	423.5	997.5	772.7	695.3	644.1
87.5°	149.5	68.0	73.2	77.4	95.1	142.2	231.1	522.8	406.7	356.5	350.3
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)