

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: P651309

Luminaire Tested: **GALN-SA3D-840-U-T2R**

Issue Date: 1/4/2021

Test Information

Test Method: LM-79-08
Report Number: P651309
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2011-042-6)
Test Lab: INNOVATION CENTER
Issue Date: 1/4/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: GALN-SA3D-840-U-T2R
Description: GALLEON AREA AND ROADWAY LUMINAIRE
(3) 80 CRI, 4000K, 1200mA LIGHTSQUARES WITH 16 LEDS EACH AND TYPE II
ROADWAY OPTICS
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19792.9 lumens
Efficiency: N/A
Efficacy: 107.6 lumens/watt
Luminous Opening: Rectangular (W 1' x L: 1' x H: 0')
IES Classification: Type II - Short
BUG Rating: B2 - U0 - G2

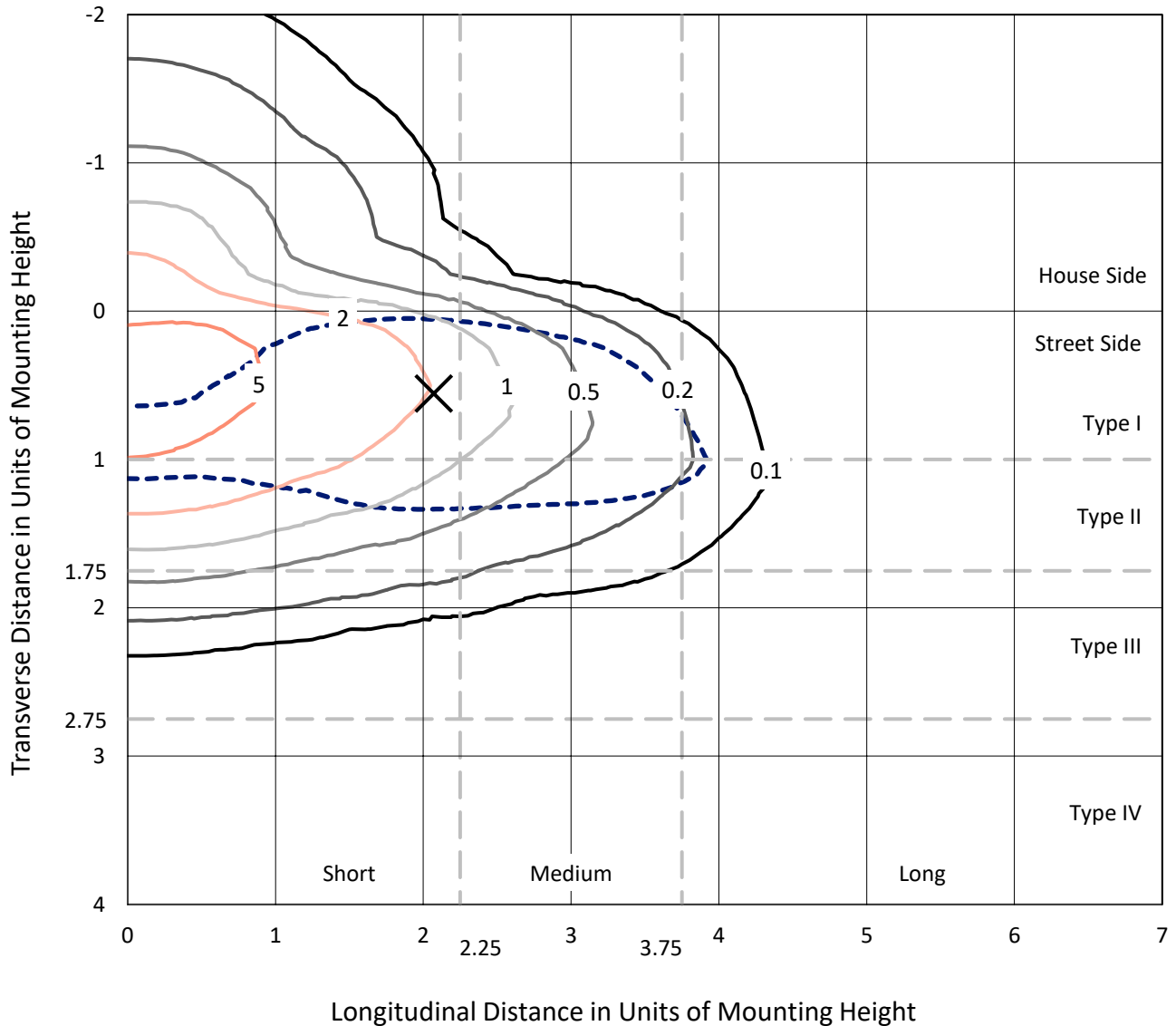
Input Watts (W): 184
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

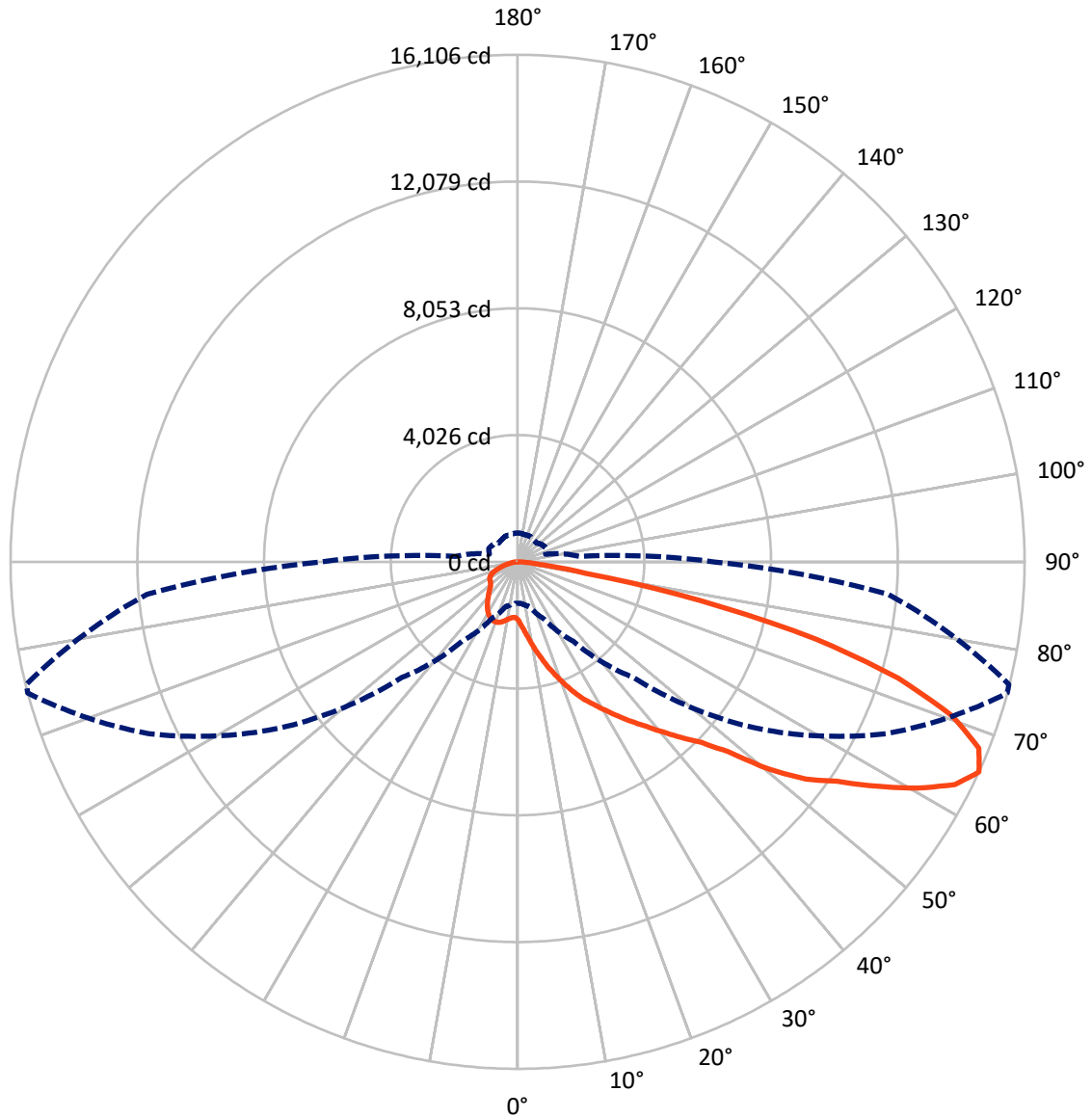
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.6 fc
 Type II - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral - - - Horizontal Cone Through 65-Deg Vertical

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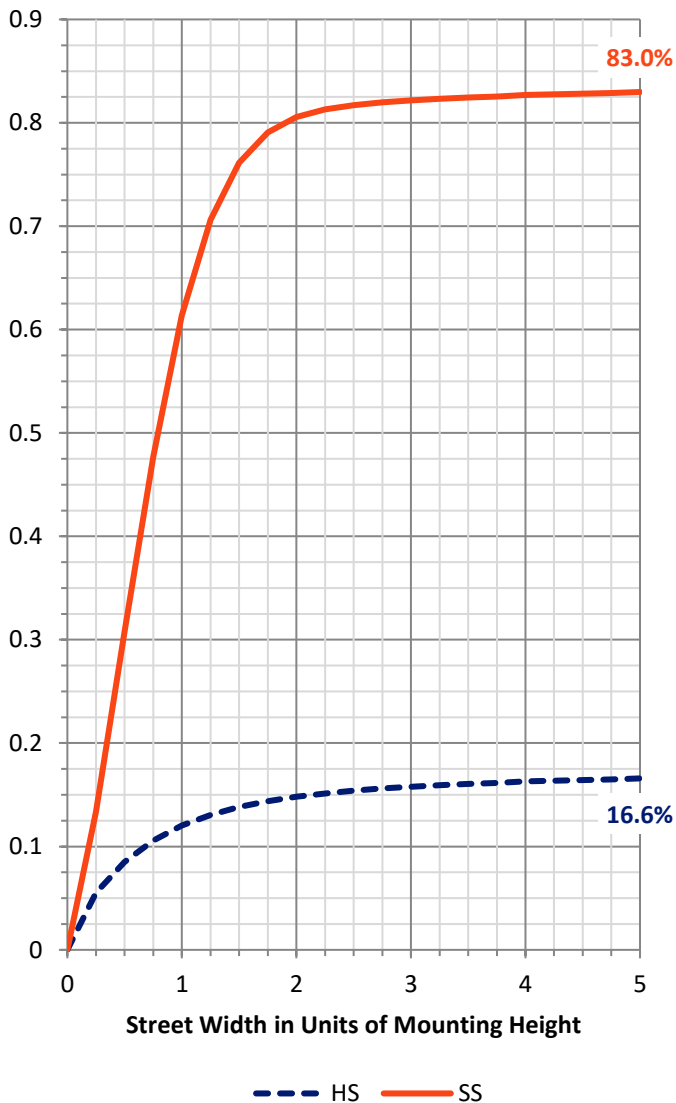
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	3327.5	0.0	3327.5
	% Fixture	16.8	0.0	16.8
Street Side	Lumens	16465.5	0.0	16465.5
	% Fixture	83.2	0.0	83.2
Total	Lumens	19792.9	0.0	19792.9
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	223.4	1.1
10°-20°	875.2	4.4
20°-30°	1690.5	8.5
30°-40°	2745.9	13.9
40°-50°	3777.3	19.1
50°-60°	4459.6	22.5
60°-70°	3907.4	19.7
70°-80°	1865.4	9.4
80°-90°	248.2	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°	19792.9	100.0
0°-180°	19792.9	100.0

Coefficient of Utilization

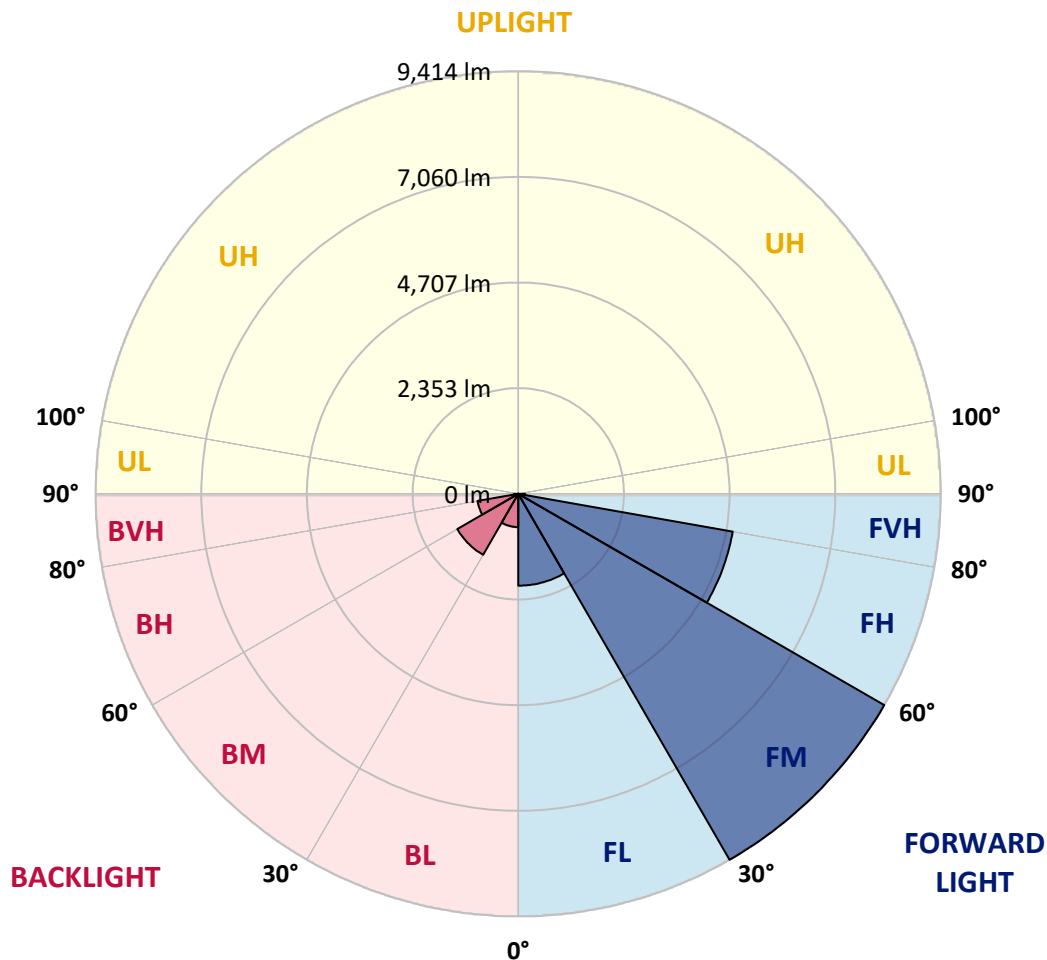


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2046.3	10.3			
FM (30°-60°)	9413.9	47.6			
FH (60°-80°)	4850.2	24.5			G2/5000
FVH (80°-90°)	155.1	0.8			G2/225
BL (0°-30°)	742.8	3.8	B2/1000		
BM (30°-60°)	1568.9	7.9	B2/2500		
BH (60°-80°)	922.6	4.7	B2/1000		G2/1000
BVH (80°-90°)	93.1	0.5			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B2-U0-G2
 Type II Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	76°	85°
0°	1839.0	1839.0	1839.0	1839.0	1839.0	1839.0	1839.0	1839.0	1839.0	1839.0	1839.0
2.5°	2443.4	2427.3	2410.1	2362.9	2312.4	2255.6	2174.0	2095.6	1991.5	1988.2	1910.9
5°	3120.9	3110.1	3033.9	2989.8	2872.9	2717.2	2585.1	2380.1	2190.0	2167.5	2017.2
7.5°	3743.5	3701.7	3672.6	3593.3	3477.3	3277.6	3022.0	2745.1	2427.3	2397.3	2148.2
10°	4212.7	4208.4	4193.3	4124.6	4037.6	3839.1	3555.7	3158.5	2728.0	2668.9	2307.1
12.5°	4563.7	4567.0	4564.8	4563.7	4501.5	4332.9	4025.9	3607.1	3031.7	2989.8	2490.7
15°	4794.5	4826.8	4839.6	4893.3	4898.7	4786.0	4521.9	4040.9	3374.2	3311.9	2688.2
17.5°	4947.0	4963.1	5023.2	5114.5	5188.5	5168.1	4933.1	4442.4	3724.2	3620.1	2893.3
20°	5093.0	5120.9	5167.0	5291.6	5422.6	5482.6	5317.4	4853.6	4070.9	4004.4	3119.8
22.5°	5396.8	5436.6	5452.6	5516.0	5627.6	5733.9	5658.8	5247.6	4451.0	4360.8	3360.2
25°	5911.1	5952.9	5907.9	5892.8	5929.3	5981.9	5965.8	5619.1	4809.6	4680.8	3587.9
27.5°	6580.9	6586.3	6498.2	6414.6	6324.3	6297.5	6248.1	5948.6	5120.9	5013.5	3816.5
30°	7300.2	7274.5	7128.5	6977.1	6824.6	6674.3	6532.6	6266.4	5467.7	5344.2	4040.9
32.5°	7968.0	7954.0	7791.9	7556.8	7299.1	7157.4	6870.8	6587.4	5839.1	5720.0	4271.7
35°	8468.3	8488.6	8310.4	8053.8	7772.6	7647.0	7285.2	6924.5	6223.5	6093.5	4522.9
37.5°	8823.6	8812.8	8655.1	8432.9	8186.0	8076.4	7769.4	7292.7	6636.8	6512.2	4797.7
40°	8950.3	8943.9	8826.8	8664.7	8508.0	8469.4	8276.1	7689.9	7110.2	6964.2	5128.4
42.5°	8869.8	8883.7	8806.4	8762.5	8733.4	8761.4	8779.6	8210.6	7626.6	7492.4	5487.0
45°	8622.9	8615.4	8604.6	8676.5	8839.8	9023.3	9277.7	8702.3	8188.1	8080.7	5967.9
47.5°	8181.6	8235.3	8262.2	8460.7	8817.2	9251.9	9851.1	9361.5	9002.9	8909.5	6701.2
50°	7564.3	7607.3	7766.1	8119.4	8650.8	9337.9	10411.4	10439.3	10362.0	10187.0	7497.8
52.5°	6600.3	6666.9	6994.3	7641.7	8309.4	9302.4	10750.7	11363.7	11465.7	11334.7	8282.5
55°	5521.3	5614.8	5960.4	6809.6	7839.1	9109.2	10984.7	11899.4	12306.3	12184.9	9038.3
57.5°	4465.0	4563.7	4919.1	5741.4	7019.0	8681.9	11138.2	12496.3	13450.7	13292.8	9978.8
60°	3346.3	3449.4	3754.2	4601.3	5850.9	7846.7	11034.1	13013.7	14594.0	14526.4	10920.3
62.5°	2158.9	2272.7	2537.9	3238.9	4497.2	6705.5	10476.9	13299.3	15583.8	15502.2	11607.4
65°	1315.2	1328.0	1474.0	2010.7	3077.9	5191.7	9202.6	12920.4	16105.6	16080.9	11816.7
67.5°	850.3	870.7	937.2	1204.6	1845.5	3606.1	7358.2	11669.6	15800.7	15792.1	11384.0
70°	718.2	724.7	754.7	812.7	1072.5	2186.9	5167.0	9676.0	14642.3	14642.3	10343.8
72.5°	642.0	650.6	661.3	679.5	765.5	1238.9	3083.3	7532.1	12642.2	12726.0	8804.3
75°	583.0	580.8	587.3	590.5	652.7	809.5	1594.2	5570.7	9780.2	9612.7	6375.9
77.5°	499.2	502.4	499.2	513.2	576.5	616.2	809.5	3738.2	5927.1	5710.3	3200.3
80°	410.1	415.5	420.8	429.4	492.7	468.1	486.4	1703.8	2192.2	2146.1	988.8
82.5°	308.1	315.6	324.2	344.6	387.5	309.2	307.0	727.9	791.2	724.7	363.9
85°	124.6	147.1	222.2	242.6	243.7	169.6	189.0	303.9	323.1	315.6	142.8
87.5°	29.0	34.3	71.9	108.4	99.8	63.3	69.8	98.7	112.7	104.1	48.3
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°	1839.0	1839.0	1839.0	1839.0	1839.0	1839.0	1839.0	1839.0	1839.0	1839.0	1839.0
2.5°	1875.5	1837.9	1773.5	1724.1	1688.7	1657.6	1638.3	1626.4	1622.1	1621.1	1622.1
5°	1938.8	1872.3	1770.3	1705.9	1670.5	1650.0	1638.3	1637.2	1638.3	1639.4	1636.1
7.5°	2025.8	1930.3	1797.1	1737.0	1710.2	1695.1	1689.8	1687.6	1688.7	1687.6	1687.6
10°	2141.8	2010.7	1849.8	1787.5	1764.9	1747.8	1739.2	1733.8	1729.5	1725.2	1723.0
12.5°	2269.5	2099.9	1906.6	1846.5	1814.3	1787.5	1768.1	1754.2	1744.6	1734.9	1732.7
15°	2412.3	2194.3	1970.0	1886.3	1840.1	1800.3	1767.1	1744.6	1727.3	1713.4	1712.4
17.5°	2548.7	2283.5	2012.9	1904.5	1836.8	1781.1	1737.0	1705.9	1684.4	1666.2	1664.0
20°	2694.6	2368.3	2032.3	1892.7	1804.6	1737.0	1679.1	1641.5	1616.8	1596.4	1593.2
22.5°	2841.7	2440.2	2030.1	1855.1	1748.9	1669.4	1608.2	1568.5	1539.5	1519.1	1511.6
25°	2982.4	2498.2	2003.3	1795.0	1671.6	1588.9	1526.6	1490.1	1464.3	1439.6	1439.6
27.5°	3109.0	2532.5	1952.8	1722.0	1592.1	1505.1	1455.8	1422.5	1398.8	1382.8	1373.1
30°	3233.6	2548.7	1884.1	1629.7	1508.3	1434.2	1394.5	1375.2	1353.8	1335.5	1333.4
32.5°	3345.2	2545.5	1798.2	1539.5	1428.9	1376.3	1360.2	1345.2	1322.6	1296.9	1290.4
35°	3453.7	2523.9	1696.2	1440.7	1362.3	1342.0	1346.3	1324.7	1284.0	1251.7	1246.4
37.5°	3571.7	2485.3	1584.6	1360.2	1306.5	1325.8	1336.6	1289.3	1222.8	1172.4	1160.5
40°	3708.1	2441.3	1468.6	1279.7	1262.5	1310.8	1310.8	1223.8	1132.6	1101.5	1092.9
42.5°	3868.0	2404.8	1372.0	1212.0	1226.0	1274.3	1269.0	1136.9	1099.4	1083.2	1078.9
45°	4121.4	2391.9	1272.2	1153.0	1196.0	1231.4	1187.3	1106.8	1085.4	1072.5	1068.2
47.5°	4521.9	2406.9	1184.1	1109.0	1161.6	1188.4	1096.1	1086.5	1071.4	1053.2	1051.0
50°	4893.3	2393.0	1121.9	1084.3	1131.6	1136.9	1058.6	1061.8	1053.2	1032.7	1028.5
52.5°	5197.1	2349.0	1082.1	1071.4	1105.7	1046.7	1023.1	1034.9	1031.7	1005.9	1001.6
55°	5531.0	2322.1	1062.9	1071.4	1088.6	968.3	989.9	1007.0	1002.7	984.5	983.4
57.5°	5935.7	2327.5	1048.9	1074.6	1071.4	928.6	956.6	976.9	975.9	970.5	970.5
60°	6350.1	2329.7	1027.4	1073.5	1051.0	897.5	922.2	951.2	953.4	956.6	956.6
62.5°	6487.6	2236.2	985.6	1054.3	1005.9	867.4	889.9	929.7	927.5	936.1	937.2
65°	6231.0	1977.5	923.2	1010.2	948.0	846.0	865.3	901.8	889.9	912.6	916.9
67.5°	5671.6	1636.1	826.6	930.8	883.6	823.4	849.2	863.1	841.7	885.7	886.8
70°	4901.9	1277.6	704.3	818.0	810.6	799.8	836.3	814.8	784.7	838.5	827.7
72.5°	4098.9	975.9	562.5	668.8	712.8	764.4	813.8	752.5	710.7	726.8	707.4
75°	3079.0	721.4	452.0	523.9	593.7	713.9	793.4	677.4	613.0	598.0	593.7
77.5°	1569.6	471.3	338.2	391.8	445.6	645.2	765.5	589.4	507.8	484.2	473.5
80°	560.4	293.1	238.3	270.5	300.6	555.1	668.8	487.4	394.0	389.7	394.0
82.5°	259.8	189.0	160.0	177.1	178.2	370.4	510.0	363.9	299.6	455.1	384.3
85°	111.7	94.4	90.2	88.1	81.6	165.3	286.6	195.4	304.9	136.3	125.6
87.5°	33.3	37.6	33.3	24.7	18.2	18.2	29.0	10.8	7.5	5.4	5.4
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)