

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: P591245

Luminaire Tested: **CTN-CA6-230-727-U-T3-SSS-HM-EX120**

Issue Date: 1/19/2022

**Test Information**

Test Method: LM-79-08  
Report Number: P591245  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-8)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 1/19/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: McGRAW-EDISON  
Catalog Number: CTN-CA6-230-727-U-T3-SSS-HM-EX120  
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE  
Light Source: (6) 2700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 17447 lumens  
Efficiency: N/A  
Efficacy: 76.6 lumens/watt  
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')  
IES Classification: Type III - Medium  
BUG Rating: B3 - U0 - G3

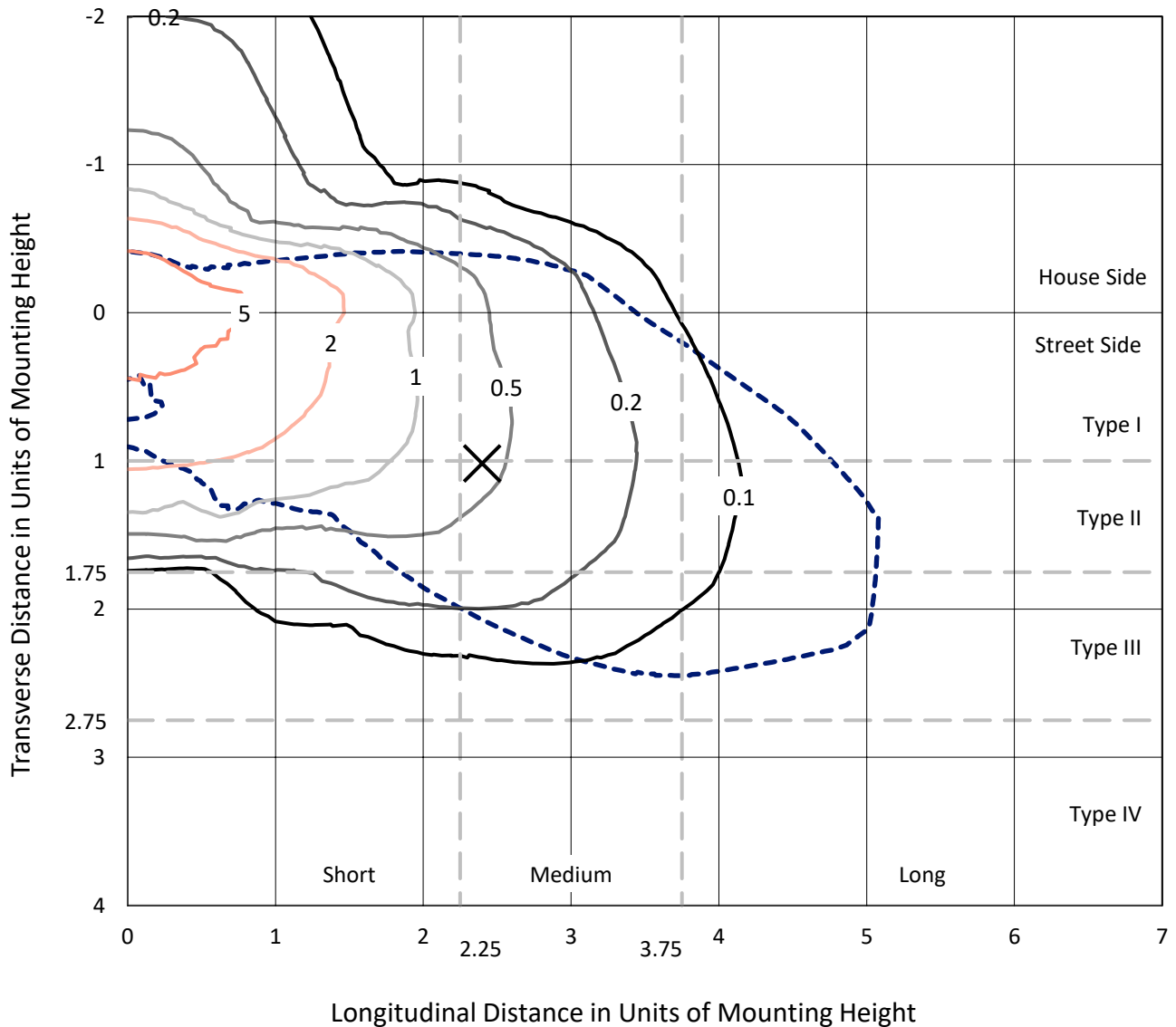
Input Watts (W): 227.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

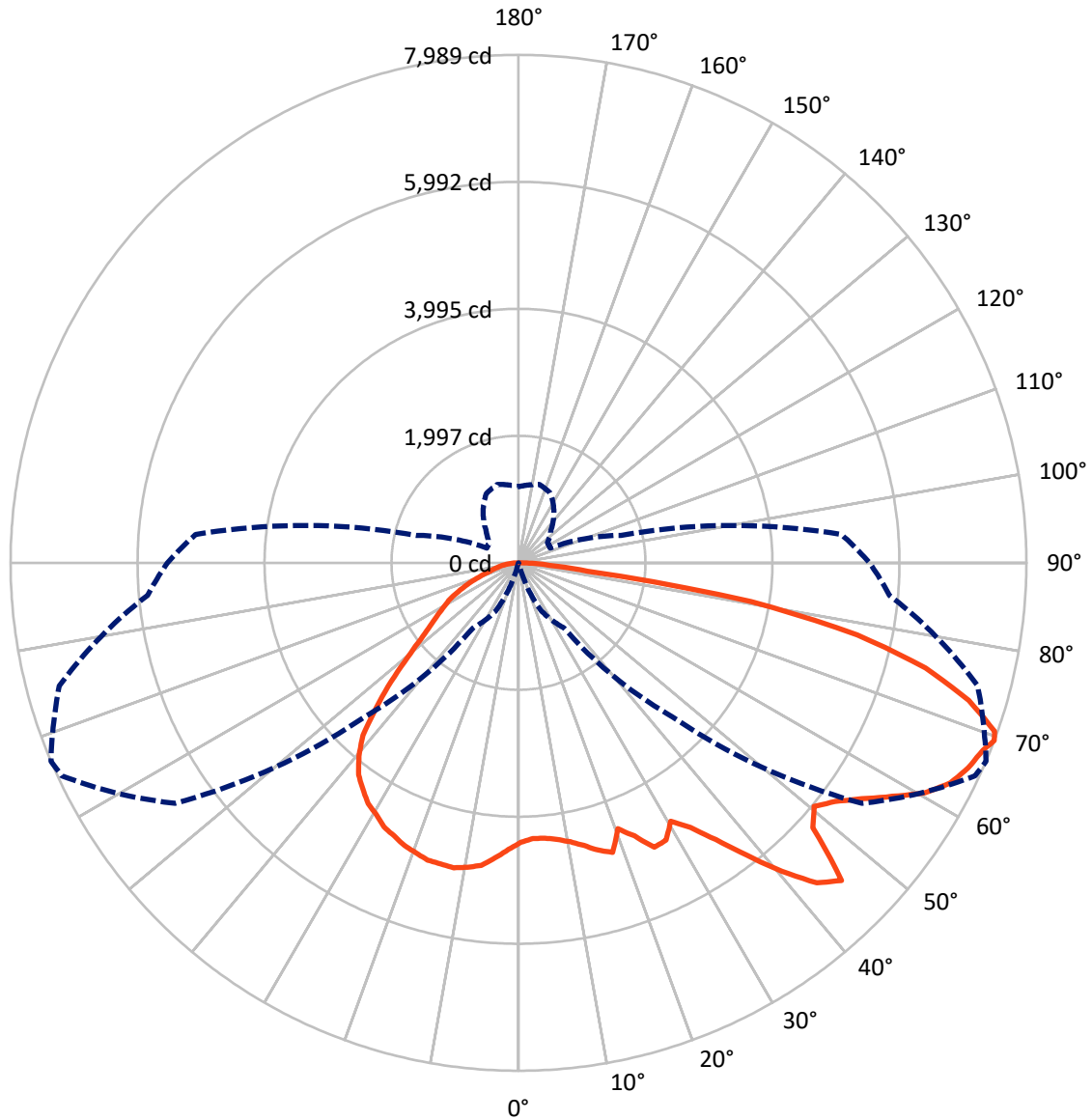
× Max cd  
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.9 fc  
 Type III - Medium - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 67-Deg Lateral      - - - Horizontal Cone Through 69-Deg Vertical

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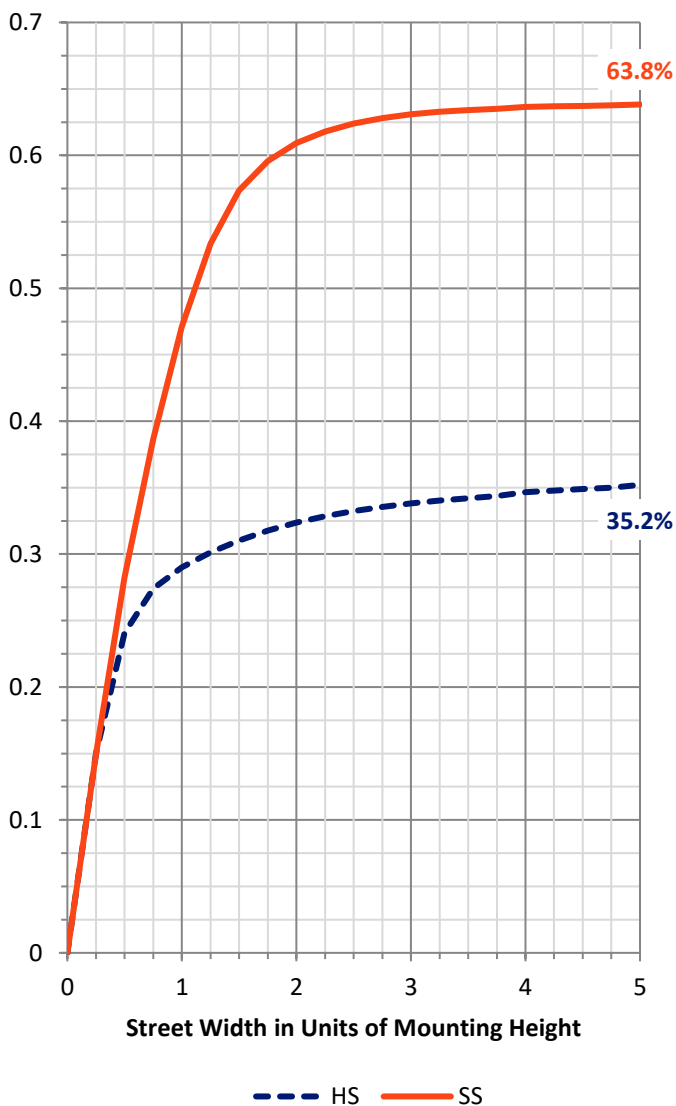
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	6311.8	0.0	6311.8
	% Fixture	36.2	0.0	36.2
<b>Street Side</b>	Lumens	11135.2	0.0	11135.2
	% Fixture	63.8	0.0	63.8
<b>Total</b>	Lumens	17447.0	0.0	17447.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	439.5	2.5
10°-20°	1356.9	7.8
20°-30°	2002.8	11.5
30°-40°	2516.3	14.4
40°-50°	2951.5	16.9
50°-60°	3088.6	17.7
60°-70°	2759.3	15.8
70°-80°	1942.0	11.1
80°-90°	390.1	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°	17447.0	100.0
0°-180°	17447.0	100.0

**Coefficient of Utilization**

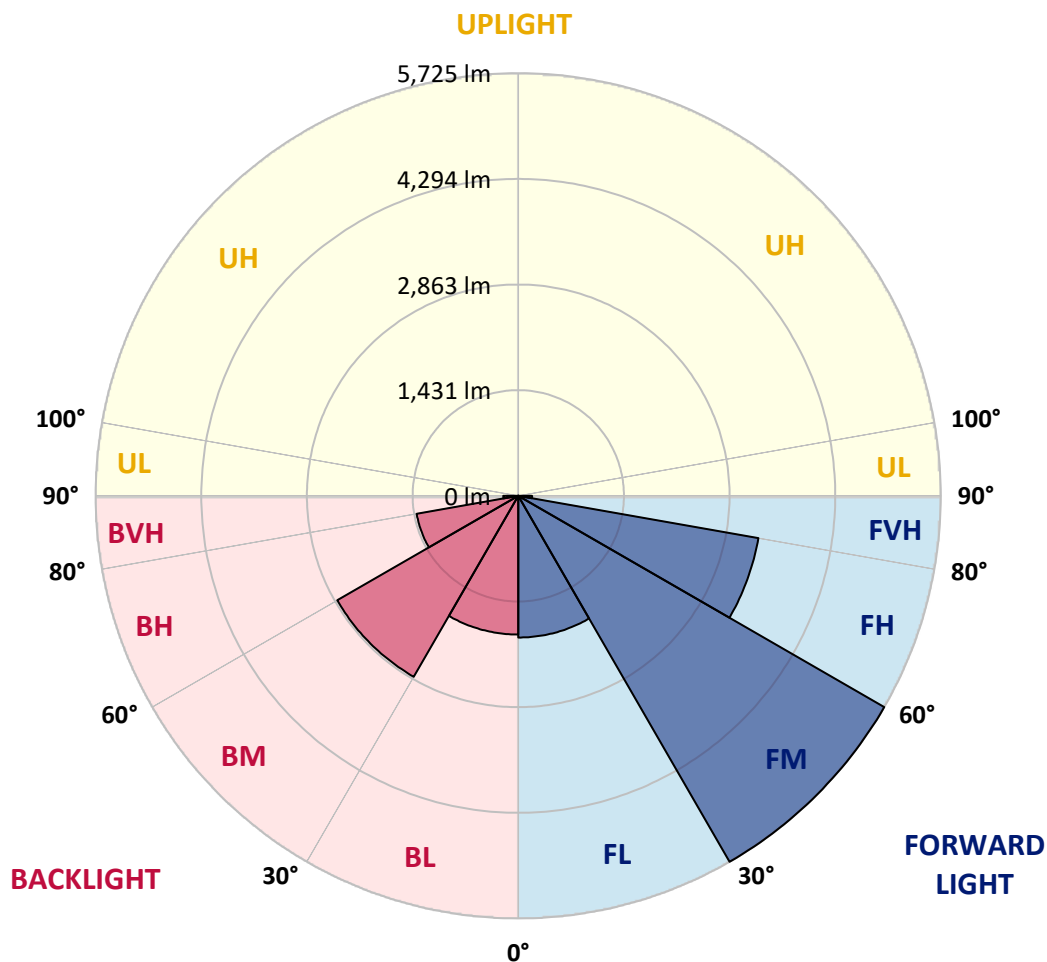


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1920.0	11.0			
FM (30°-60°)	5725.3	32.8			
FH (60°-80°)	3303.5	18.9			G2/5000
FVH (80°-90°)	186.4	1.1			G2/225
BL (0°-30°)	1879.2	10.8	B3/2500		
BM (30°-60°)	2831.1	16.2	B3/5000		
BH (60°-80°)	1397.8	8.0	B3/2500		G3/2500
BVH (80°-90°)	203.7	1.2			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B3-U0-G3**  
 Type III Medium





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	4395.0	4395.0	4395.0	4395.0	4395.0	4395.0	4395.0	4395.0	4395.0	4395.0	4395.0
2.5°	4290.4	4265.2	4276.9	4310.3	4240.8	4290.4	4272.4	4322.9	4341.8	4339.1	4411.3
5°	4324.7	4296.8	4301.3	4326.5	4250.8	4289.5	4272.4	4328.3	4350.0	4343.6	4441.9
7.5°	4446.4	4415.8	4405.9	4414.0	4331.9	4361.7	4324.7	4369.8	4393.2	4393.2	4505.1
10°	4638.5	4601.5	4579.9	4579.0	4482.5	4469.0	4423.9	4444.6	4461.8	4476.2	4600.6
12.5°	4839.6	4808.9	4781.0	4765.7	4638.5	4607.0	4541.1	4556.5	4561.9	4581.7	4705.2
15°	5022.7	4992.0	4983.9	4959.5	4833.3	4781.0	4689.0	4681.8	4689.0	4700.7	4823.4
17.5°	4952.3	4954.1	4999.2	5003.7	4839.6	4718.8	4654.7	4776.5	4788.2	4881.1	4960.4
20°	4818.9	4753.0	4516.8	4387.8	4406.8	4563.7	4447.3	4441.9	4466.3	4631.3	5033.5
22.5°	4013.6	3977.5	4107.4	4148.9	4298.6	4358.1	4634.9	4642.1	4666.5	4666.5	4783.7
25°	3465.4	3652.0	3904.5	4355.4	4308.5	4320.2	4432.9	4911.7	4957.7	4956.8	4939.7
27.5°	3582.6	3559.1	3937.0	4220.1	4554.7	4533.9	4411.3	4736.8	4940.6	5290.5	5209.3
30°	3723.3	3706.1	3734.1	4212.9	4767.5	4795.4	4681.8	4648.4	4717.9	5452.8	5517.7
32.5°	3854.0	3833.3	3864.8	3937.9	4469.0	5065.0	4977.6	4937.0	4962.2	5110.1	5914.5
35°	3969.4	3967.6	4003.7	4090.3	4542.9	5158.8	5280.5	5277.8	5345.5	5472.6	5972.2
37.5°	4051.5	4050.6	4079.4	4180.4	4282.3	4764.8	5564.6	5726.0	5834.2	6022.7	5834.2
40°	4050.6	4065.0	4140.8	4270.6	4405.9	4551.0	5689.9	6252.6	6382.5	6516.8	6203.0
42.5°	3965.8	3973.9	4107.4	4348.2	4515.9	4641.2	5192.2	6736.8	6882.0	6872.1	6493.4
45°	3887.4	3891.0	4039.8	4335.5	4607.9	4834.2	5090.3	6735.0	7127.3	7188.6	6766.6
47.5°	3785.5	3785.5	3932.5	4262.5	4690.8	5051.5	5362.6	5818.0	6227.4	7462.7	6992.9
50°	3654.7	3671.0	3490.6	4186.7	4730.5	5258.0	5593.4	5968.6	6025.4	6673.7	7203.0
52.5°	3446.4	3437.4	2727.7	4102.9	4746.7	5407.7	5833.3	6203.9	6234.6	6169.7	6997.4
55°	2172.3	2422.1	2412.1	4004.6	4736.8	5504.2	6017.3	6462.7	6549.3	6469.9	5886.5
57.5°	1312.0	1252.5	2061.4	3723.3	3804.4	5579.0	6267.0	6855.9	6931.6	6747.7	5985.7
60°	512.2	483.3	522.1	1694.4	2729.5	5190.4	6607.0	7273.4	7345.5	7011.9	6069.6
62.5°	64.0	55.0	46.9	1173.2	1734.9	3855.8	6787.3	7609.7	7623.2	7203.0	6085.8
65°	9.0	9.9	18.0	1046.0	1576.2	3790.0	6850.5	7746.8	7774.7	7341.0	6030.8
67.5°	3.6	4.5	14.4	909.8	1383.3	3615.0	6694.5	7841.5	7873.9	7474.5	5977.6
69°	3.6	4.5	14.4	817.9	1251.6	3422.1	6594.4	7925.3	7989.4	7477.2	5855.9
70°	3.6	4.5	13.5	752.0	1148.8	3258.9	6497.9	7892.9	7944.3	7405.0	5720.6
72.5°	3.6	4.5	13.5	578.9	873.8	2616.8	5887.4	7433.0	7406.8	6950.6	5194.0
75°	4.5	4.5	13.5	406.7	606.0	1861.2	4968.5	6600.7	6612.4	6187.7	4368.9
77.5°	4.5	4.5	13.5	258.8	382.3	1076.7	3597.9	5413.1	5446.5	5155.2	3271.5
80°	4.5	4.5	13.5	118.1	237.2	562.7	1769.2	3527.6	3707.0	3460.8	1795.3
82.5°	4.5	4.5	12.6	73.9	129.8	253.4	697.9	1106.4	1095.6	1078.5	570.8
85°	3.6	3.6	9.9	52.3	86.6	147.0	387.7	496.0	489.6	433.7	294.9
87.5°	1.8	1.8	5.4	21.6	36.1	66.7	193.9	225.4	214.6	184.0	126.2
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°	4395.0	4395.0	4395.0	4395.0	4395.0	4395.0	4395.0	4395.0	4395.0	4395.0	4395.0
2.5°	4444.6	4451.0	4480.7	4519.5	4531.2	4581.7	4589.8	4672.8	4685.4	4706.1	4715.2
5°	4489.7	4514.1	4579.0	4670.1	4747.6	4827.0	4829.7	4930.7	4956.8	4951.4	4977.6
7.5°	4553.7	4594.3	4693.5	4819.8	4847.7	4950.5	4943.3	5043.4	5045.2	5030.8	5070.4
10°	4652.0	4702.5	4792.7	4870.3	4923.5	4990.2	4981.2	5075.9	5062.3	5047.0	5091.2
12.5°	4753.0	4779.2	4834.2	4920.8	4932.5	4955.9	4944.2	5031.7	5017.2	4998.3	5041.6
15°	4841.4	4854.0	4854.0	4900.9	4871.2	4890.1	4850.4	4920.8	4887.4	4878.4	4919.9
17.5°	4955.9	4935.2	4892.8	4889.2	4811.6	4782.8	4723.3	4742.2	4679.1	4685.4	4707.0
20°	5084.9	5038.9	4927.1	4815.3	4671.9	4603.3	4485.2	4476.2	4417.6	4406.8	4427.5
22.5°	5132.7	5173.2	4968.5	4752.1	4505.1	4351.8	4212.0	4145.3	4059.6	4004.6	4011.8
25°	5277.8	5350.9	5031.7	4639.4	4308.5	4056.0	3845.9	3693.5	3564.5	3498.7	3512.2
27.5°	5474.4	5593.4	5067.7	4561.0	4050.6	3720.5	3368.9	3168.7	3035.2	2966.7	2964.9
30°	5755.8	5905.4	5137.2	4396.8	3763.8	3279.6	2845.9	2609.6	2500.5	2455.4	2459.0
32.5°	6107.4	6287.8	5281.4	4259.8	3451.8	2808.0	2313.8	2107.3	2057.8	2049.6	2045.1
35°	6573.6	6752.2	5396.0	4048.8	3047.0	2273.3	1857.6	1711.5	1719.6	1717.8	1723.2
37.5°	6497.9	7175.1	5526.7	3842.3	2562.7	1781.8	1501.4	1419.3	1422.0	1453.6	1459.9
40°	6212.9	6805.4	5721.5	3500.5	1996.4	1368.8	1184.0	1165.0	1242.6	1312.0	1324.6
42.5°	6436.6	6582.6	5747.6	3131.7	1460.8	1049.6	990.1	1068.6	1193.9	1274.1	1288.6
45°	6660.2	6778.3	5596.2	2579.9	1047.8	898.1	942.3	1055.0	1193.9	1279.6	1289.5
47.5°	6887.4	6886.5	5419.4	2068.6	856.6	858.4	930.6	1055.9	1201.1	1287.7	1293.1
50°	7031.7	6974.0	4957.7	1620.4	797.1	835.0	924.3	1061.3	1199.3	1262.4	1265.1
52.5°	7103.8	7018.2	4550.1	1294.9	769.2	816.1	925.2	1074.0	1189.4	1224.6	1222.7
55°	6982.1	6993.8	4212.9	1076.7	743.0	800.7	929.7	1083.0	1193.9	1230.0	1230.0
57.5°	6830.6	6833.3	3944.2	911.7	716.9	788.1	935.1	1096.5	1276.9	1344.5	1334.6
60°	6724.2	6602.5	3563.6	808.0	687.1	776.4	942.3	1155.1	1471.6	1540.2	1516.7
62.5°	6549.3	6384.3	3172.3	735.8	653.8	767.4	946.8	1237.2	1497.8	1501.4	1443.7
65°	6242.7	6006.4	2560.9	664.6	619.5	754.8	944.1	1267.8	1379.7	1325.5	1309.3
67.5°	5799.0	5490.6	2007.3	593.3	581.6	735.8	962.1	1211.9	1303.0	1258.8	1237.2
69°	5522.2	5099.3	1666.4	551.0	557.3	721.4	971.2	1201.1	1276.0	1221.8	1196.6
70°	5312.1	4760.2	1411.2	523.0	536.5	708.8	953.1	1194.8	1263.3	1196.6	1166.8
72.5°	4510.5	3827.0	903.5	458.1	482.4	677.2	904.4	1155.1	1235.4	1190.3	1153.3
75°	3487.0	2810.7	576.2	398.6	427.4	630.3	853.9	1127.2	1248.0	1166.8	1085.7
77.5°	2347.2	1569.9	440.0	334.5	362.5	569.0	773.7	1048.7	1204.7	1133.5	1033.4
80°	1069.5	598.8	340.0	271.4	293.1	458.1	667.3	927.9	1138.9	1138.0	1065.8
82.5°	428.3	400.4	252.5	207.4	230.8	341.8	528.4	794.4	1004.5	1047.8	1119.1
85°	249.8	252.5	167.7	144.3	172.2	251.6	376.9	614.1	817.0	903.5	964.0
87.5°	101.9	113.6	78.5	75.7	94.7	134.4	173.1	297.6	440.0	540.1	577.1
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)