

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: P591151

Luminaire Tested: **CTN-CA6-230-722-U-T3-SSS-HM-EX90**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591151
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-7)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA6-230-722-U-T3-SSS-HM-EX90
Description: CELESTEON HIGH MAST LUMINAIRE, 90D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (6) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 19449 lumens
Efficiency: N/A
Efficacy: 85.4 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type III - Medium
BUG Rating: B3 - U0 - G3

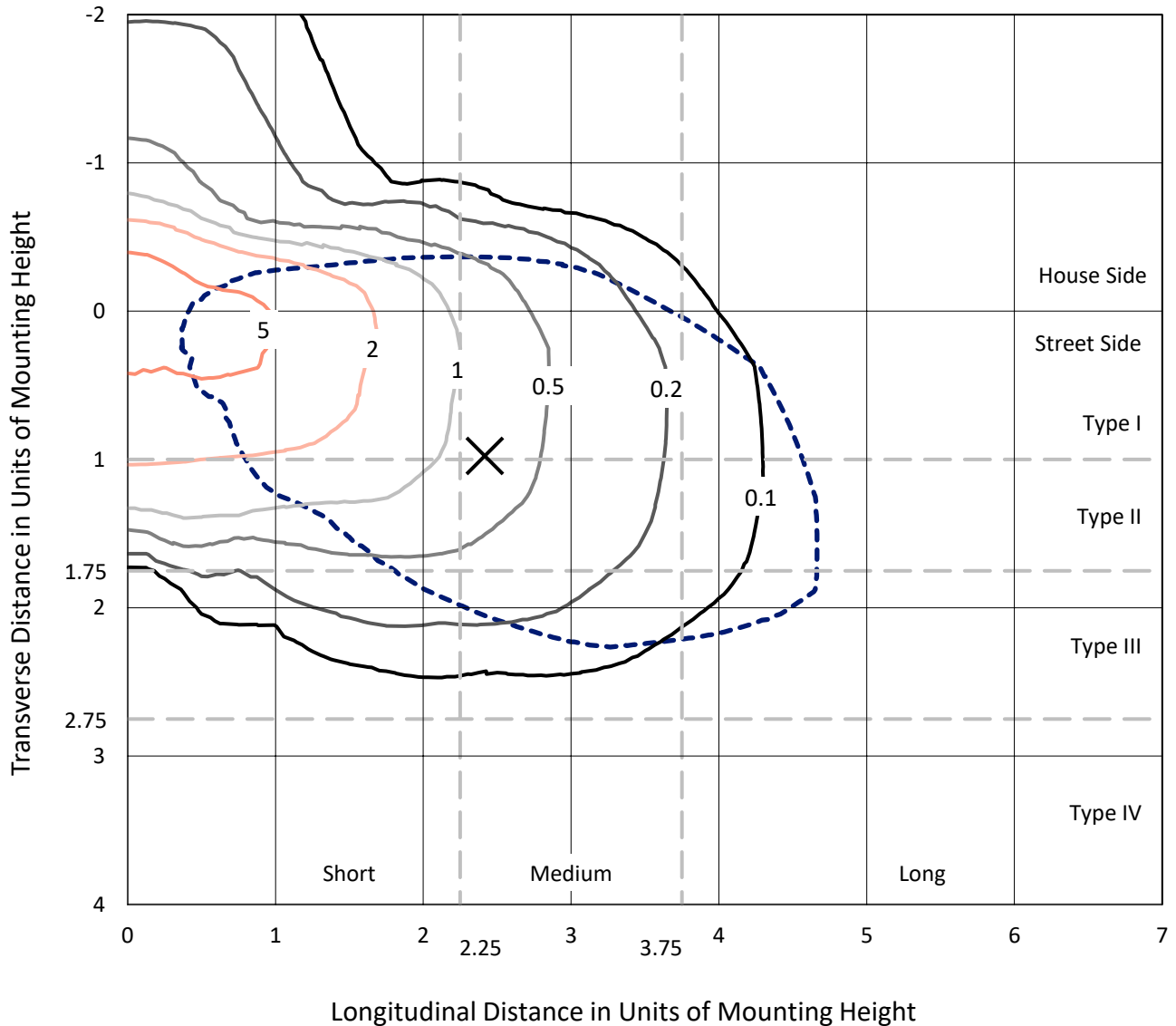
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

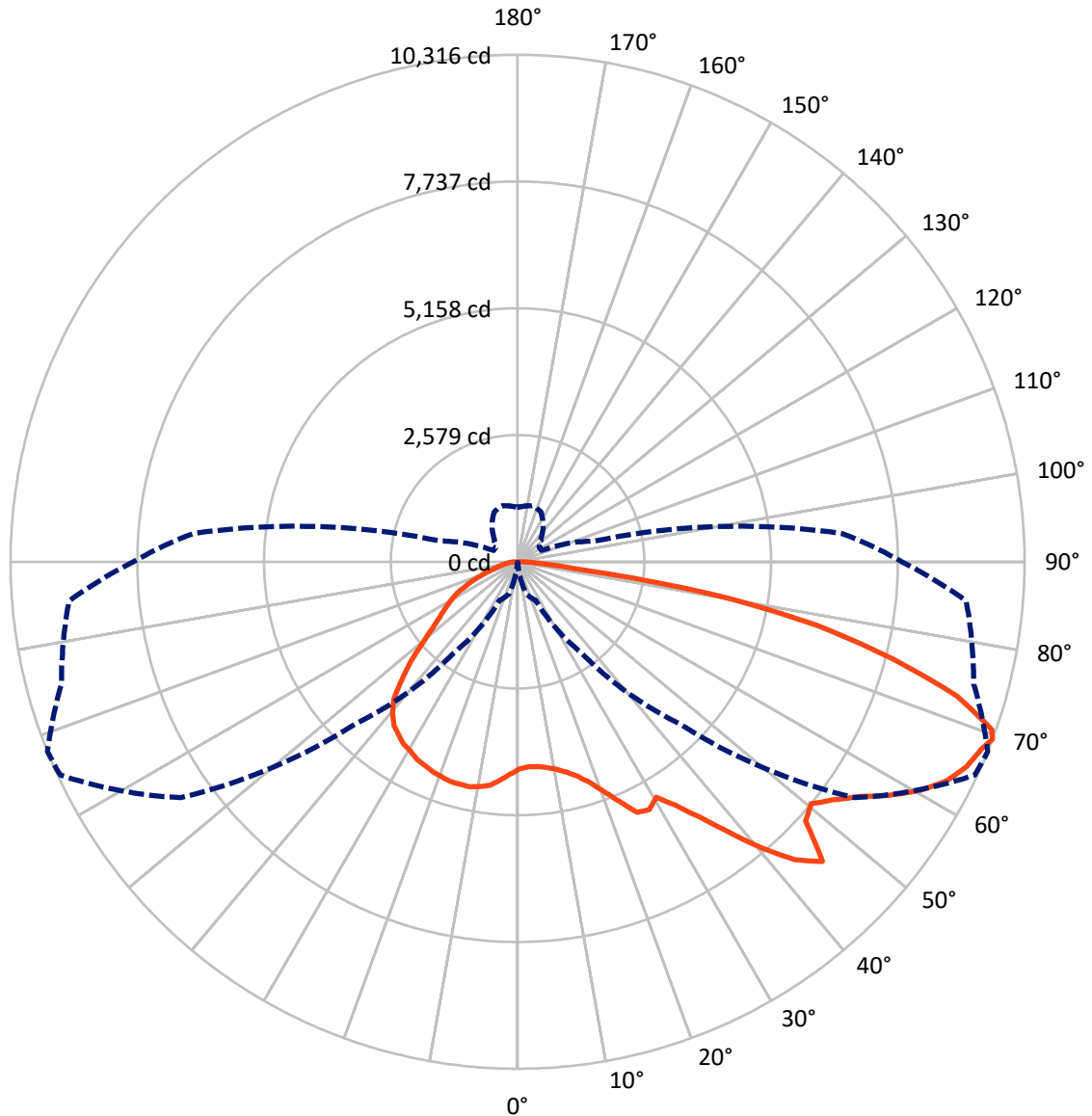
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 7.5 fc
 Type III - Medium - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 68-Deg Lateral - - - Horizontal Cone Through 69-Deg Vertical

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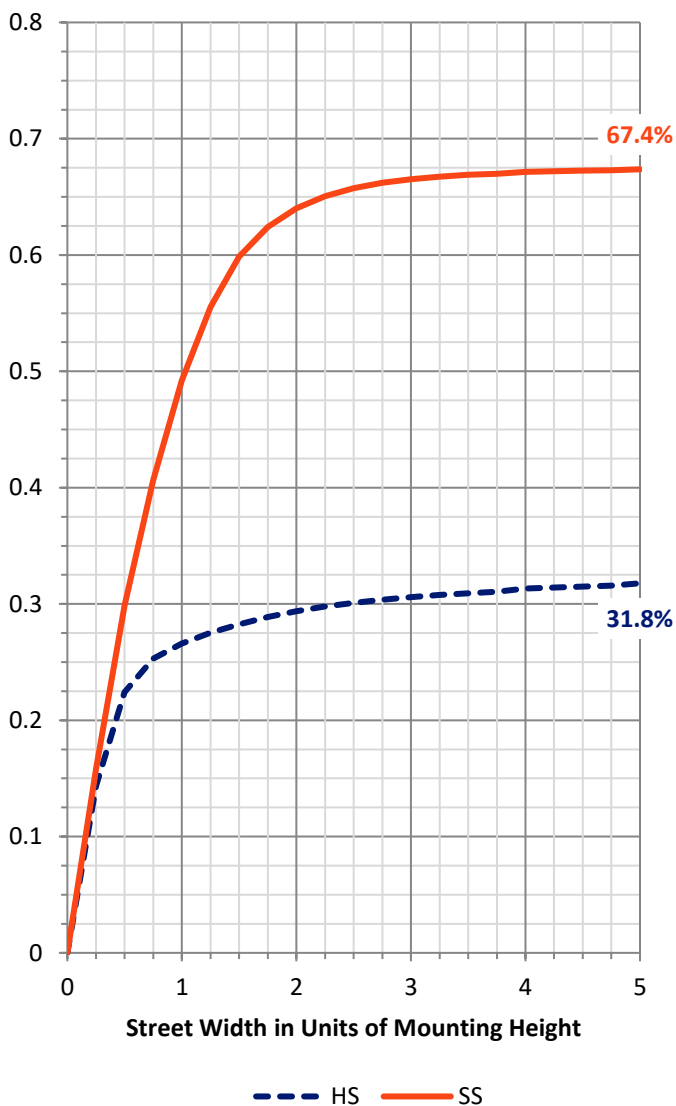
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	6344.0	0.0	6344.0
	% Fixture	32.6	0.0	32.6
Street Side	Lumens	13105.0	0.0	13105.0
	% Fixture	67.4	0.0	67.4
Total	Lumens	19449.0	0.0	19449.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	421.1	2.2
10°-20°	1302.8	6.7
20°-30°	2003.1	10.3
30°-40°	2601.6	13.4
40°-50°	3211.4	16.5
50°-60°	3606.7	18.5
60°-70°	3524.8	18.1
70°-80°	2367.0	12.2
80°-90°	410.5	2.1
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°	19449.0	100.0
0°-180°	19449.0	100.0

Coefficient of Utilization

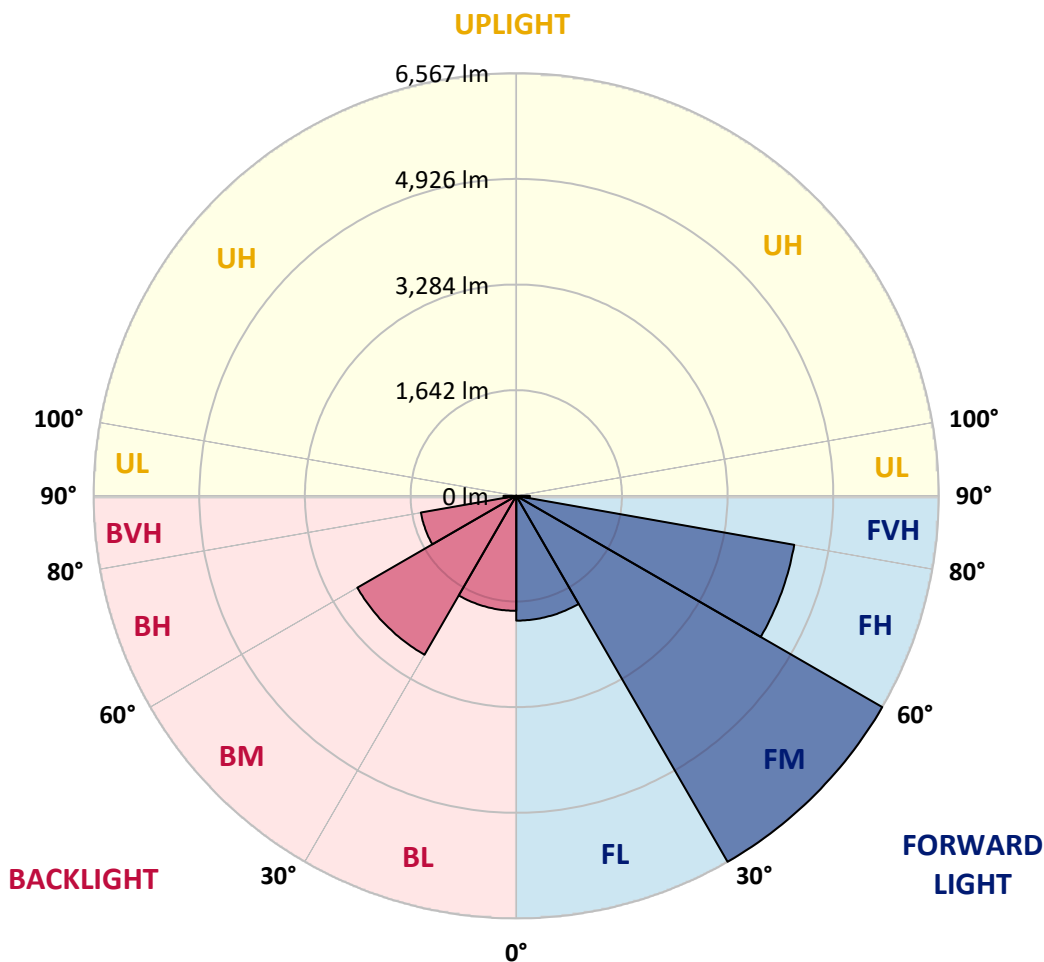


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1939.3	10.0			
FM (30°-60°)	6567.4	33.8			
FH (60°-80°)	4386.7	22.6			G2/5000
FVH (80°-90°)	211.6	1.1			G2/225
BL (0°-30°)	1787.8	9.2	B3/2500		
BM (30°-60°)	2852.2	14.7	B3/5000		
BH (60°-80°)	1505.0	7.7	B3/2500		G3/2500
BVH (80°-90°)	198.9	1.0			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°	68°	75°	85°
0°	4216.0	4216.0	4216.0	4216.0	4216.0	4216.0	4216.0	4216.0	4216.0	4216.0	4216.0
2.5°	4130.9	4105.7	4115.3	4150.0	4079.7	4125.7	4104.0	4150.9	4175.2	4164.8	4230.7
5°	4170.0	4142.2	4143.9	4168.2	4092.7	4131.8	4107.5	4157.8	4184.7	4170.0	4258.5
7.5°	4288.9	4258.5	4249.8	4248.1	4176.9	4206.4	4157.8	4198.6	4226.4	4218.6	4318.4
10°	4471.1	4434.7	4418.2	4408.6	4323.6	4314.9	4254.1	4272.4	4293.2	4301.9	4409.5
12.5°	4671.6	4622.1	4611.7	4583.1	4473.7	4454.6	4380.9	4389.5	4389.5	4409.5	4516.2
15°	4841.7	4800.9	4800.9	4771.4	4664.6	4637.7	4536.2	4525.8	4524.0	4539.7	4635.1
17.5°	4732.3	4709.8	4689.8	4675.0	4510.2	4466.8	4741.9	4723.6	4715.0	4730.6	4786.1
20°	4365.2	4426.0	4297.5	4116.2	4142.2	4664.6	5006.6	4973.6	4978.8	4994.4	4978.8
22.5°	3841.9	3691.8	3927.8	3992.9	4101.4	4487.6	5247.8	5282.5	5293.0	5293.8	5212.2
25°	3292.6	3375.9	3696.1	4192.5	4178.6	4500.6	5101.2	5595.0	5647.0	5641.8	5500.4
27.5°	3450.5	3434.9	3682.2	4008.5	4420.8	4776.6	5191.4	5411.0	5709.5	6040.2	5848.4
30°	3588.5	3575.5	3601.5	4058.0	4580.5	5052.6	5529.0	5493.4	5556.8	6155.6	6258.9
32.5°	3711.7	3702.2	3732.6	3782.9	4314.9	5350.2	5890.9	5883.9	5905.6	5952.5	6743.1
35°	3828.0	3828.9	3866.2	3948.7	4348.7	5411.8	6248.4	6322.2	6379.5	6482.8	6659.8
37.5°	3907.9	3909.6	3939.1	4038.9	4206.4	5107.2	6610.3	6873.3	6975.7	7161.4	6910.6
40°	3907.0	3920.0	3991.2	4121.4	4345.3	4905.9	6722.3	7498.1	7663.0	7798.4	7376.6
42.5°	3825.4	3832.4	3965.2	4200.3	4468.5	5058.6	6374.3	8107.4	8290.5	8253.1	7762.0
45°	3750.8	3749.1	3900.1	4189.9	4578.7	5268.7	6421.1	8090.0	8698.4	8653.2	8116.0
47.5°	3651.0	3653.6	3813.3	4144.8	4679.4	5493.4	6768.3	7356.7	7883.5	8996.9	8404.2
50°	3526.0	3541.7	3703.9	4076.2	4729.7	5703.4	7068.5	7678.6	7741.1	8080.4	8686.2
52.5°	3318.6	3290.8	3586.8	3997.3	4765.3	5856.2	7354.9	7987.6	8046.6	7923.4	8973.5
55°	1884.1	2338.0	3440.1	3905.3	4775.7	5948.2	7577.1	8339.1	8431.1	8314.8	9206.9
57.5°	1183.7	1220.2	2980.2	3661.4	4688.1	6005.4	7849.6	8821.6	8957.8	8681.0	9383.9
60°	419.2	452.1	1449.3	1681.0	3842.8	5847.5	8264.4	9390.0	9435.1	9025.5	9514.1
62.5°	44.3	58.1	982.4	1234.1	2983.6	5396.2	8550.8	9847.4	9806.6	9280.7	9584.4
65°	15.6	21.7	863.5	1103.9	2777.1	5255.6	8645.4	10042.6	10041.8	9443.8	9534.1
67.5°	12.1	16.5	750.7	959.0	2478.5	4954.5	8488.3	10189.3	10175.4	9605.2	9401.3
69°	12.1	17.4	676.0	864.4	2262.5	4666.4	8366.8	10266.5	10316.0	9607.8	9160.9
70°	12.1	17.4	628.3	798.4	2086.3	4402.5	8192.4	10207.5	10232.7	9524.5	8911.8
72.5°	12.1	17.4	486.9	617.9	1586.4	3388.9	7177.0	9301.5	9349.2	8792.9	8009.3
75°	12.1	17.4	342.8	449.5	1041.4	2273.7	5714.7	7747.2	7876.5	7431.3	6562.6
77.5°	12.1	17.4	204.8	307.2	653.5	1248.0	3932.2	5937.8	6230.2	5815.4	4690.7
80°	12.1	16.5	96.3	167.5	372.3	661.3	1801.6	3655.3	4036.3	3638.0	2453.4
82.5°	12.1	16.5	79.0	120.6	188.3	328.9	703.8	1197.6	1175.9	1056.2	790.6
85°	11.3	14.8	65.1	88.5	135.4	208.3	392.3	487.7	465.2	411.4	414.0
87.5°	7.8	8.7	22.6	39.9	54.7	103.3	190.1	206.5	210.9	176.2	184.8
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°	4216.0	4216.0	4216.0	4216.0	4216.0	4216.0	4216.0	4216.0	4216.0	4216.0	4216.0
2.5°	4262.0	4267.2	4292.3	4337.5	4336.6	4385.2	4372.2	4485.0	4489.3	4487.6	4496.3
5°	4301.0	4330.5	4386.1	4482.4	4537.9	4610.8	4596.9	4710.6	4717.6	4708.0	4732.3
7.5°	4368.7	4405.2	4496.3	4615.2	4629.9	4721.9	4702.8	4794.8	4790.5	4773.1	4814.8
10°	4464.2	4507.6	4590.0	4657.7	4700.2	4754.0	4733.2	4811.3	4796.5	4777.5	4817.4
12.5°	4561.4	4582.2	4628.2	4704.6	4708.0	4720.2	4695.9	4759.2	4742.7	4714.1	4755.8
15°	4654.2	4656.8	4649.0	4683.7	4647.3	4655.1	4602.2	4642.1	4613.4	4600.4	4627.3
17.5°	4774.9	4743.6	4688.1	4673.3	4587.4	4550.9	4472.8	4471.1	4420.8	4402.5	4420.8
20°	4919.8	4852.1	4723.6	4601.3	4452.9	4378.2	4245.5	4209.9	4169.1	4130.0	4151.7
22.5°	5120.3	4989.2	4767.9	4539.7	4294.1	4147.4	3984.2	3883.6	3807.2	3731.7	3754.3
25°	5348.5	5165.4	4830.4	4434.7	4104.0	3844.5	3632.8	3460.9	3351.6	3241.4	3290.8
27.5°	5657.4	5404.9	4868.6	4356.6	3856.7	3508.7	3171.1	2947.2	2833.5	2754.5	2729.4
30°	6017.6	5714.7	4937.1	4202.9	3566.0	3095.6	2666.9	2416.9	2296.3	2259.0	2274.6
32.5°	6456.7	6091.4	5076.9	4074.5	3270.9	2657.3	2157.4	1962.2	1875.4	1869.3	1867.6
35°	7044.2	6572.1	5196.6	3874.9	2880.4	2146.2	1716.6	1555.2	1551.7	1549.1	1555.2
37.5°	7495.5	7061.6	5324.2	3679.6	2416.9	1675.8	1372.9	1274.9	1264.4	1294.8	1302.6
40°	7851.3	7412.2	5515.1	3349.9	1873.7	1251.4	1054.4	1018.0	1091.7	1158.6	1172.5
42.5°	8172.4	7707.3	5556.8	2998.4	1365.1	960.7	873.9	934.7	1048.3	1124.7	1139.5
45°	8473.6	8017.1	5398.0	2475.9	976.3	814.0	831.4	922.5	1050.1	1131.7	1140.3
47.5°	8802.5	8224.5	5226.1	1990.8	802.8	780.2	822.7	926.9	1060.5	1142.9	1147.3
50°	9019.5	8372.9	4796.5	1556.9	752.4	759.4	819.2	936.4	1062.2	1121.2	1124.7
52.5°	9108.0	8491.8	4407.8	1246.2	727.2	743.7	823.6	952.9	1057.9	1090.9	1089.1
55°	9163.5	8546.5	4073.6	1037.1	704.7	731.6	831.4	965.0	1067.4	1101.3	1101.3
57.5°	9127.9	8424.1	3825.4	883.5	682.1	722.9	840.9	983.3	1157.7	1217.6	1211.5
60°	9101.9	8195.0	3473.1	780.2	655.2	713.4	853.1	1046.6	1350.4	1411.1	1391.1
62.5°	8967.4	8001.5	3091.2	714.2	624.8	708.2	863.5	1131.7	1377.3	1373.8	1334.7
65°	8624.6	7607.5	2489.0	647.4	593.6	701.2	867.0	1169.0	1267.0	1212.4	1201.1
67.5°	8138.6	7039.0	1963.9	580.6	558.9	686.5	895.6	1124.7	1205.4	1158.6	1141.2
69°	7821.0	6618.1	1631.5	538.9	536.3	674.3	906.9	1120.4	1182.9	1129.9	1107.4
70°	7565.0	6253.6	1408.5	512.0	519.0	664.8	895.6	1119.5	1173.3	1107.4	1082.2
72.5°	6466.3	5066.4	909.5	447.8	467.8	639.6	853.1	1090.9	1153.4	1110.0	1075.3
75°	5010.9	3688.3	588.4	387.1	414.0	597.1	810.6	1072.6	1171.6	1092.6	1018.0
77.5°	3215.3	1973.5	455.6	325.4	355.8	537.2	734.2	998.9	1137.7	1066.6	970.2
80°	1400.7	732.5	351.5	263.8	288.1	436.5	630.1	887.8	1078.7	1070.9	1005.8
82.5°	594.5	472.1	270.8	202.2	229.1	322.8	493.8	761.1	952.9	990.2	1061.4
85°	336.7	282.9	180.5	138.9	170.1	237.8	351.5	584.1	775.8	860.0	919.9
87.5°	144.9	118.0	83.3	74.6	96.3	123.2	151.0	274.2	414.0	505.1	543.3
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)