

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: P591025

Luminaire Tested: **CTN-CA6-230-722-U-T3-HSS-HM-EX120**

Issue Date: 12/14/2021

Test Information

Test Method: LM-79-08
Report Number: P591025
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2112-474-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 12/14/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: MCGRAW-EDISON
Catalog Number: CTN-CA6-230-722-U-T3-HSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE WITH FIELD INSTALLED SHIELD
Light Source: (6) 2200K CCT, 70 CRI LEDs
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 25561 lumens
Efficiency: N/A
Efficacy: 112.2 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type III - Short
BUG Rating: B3 - U0 - G4

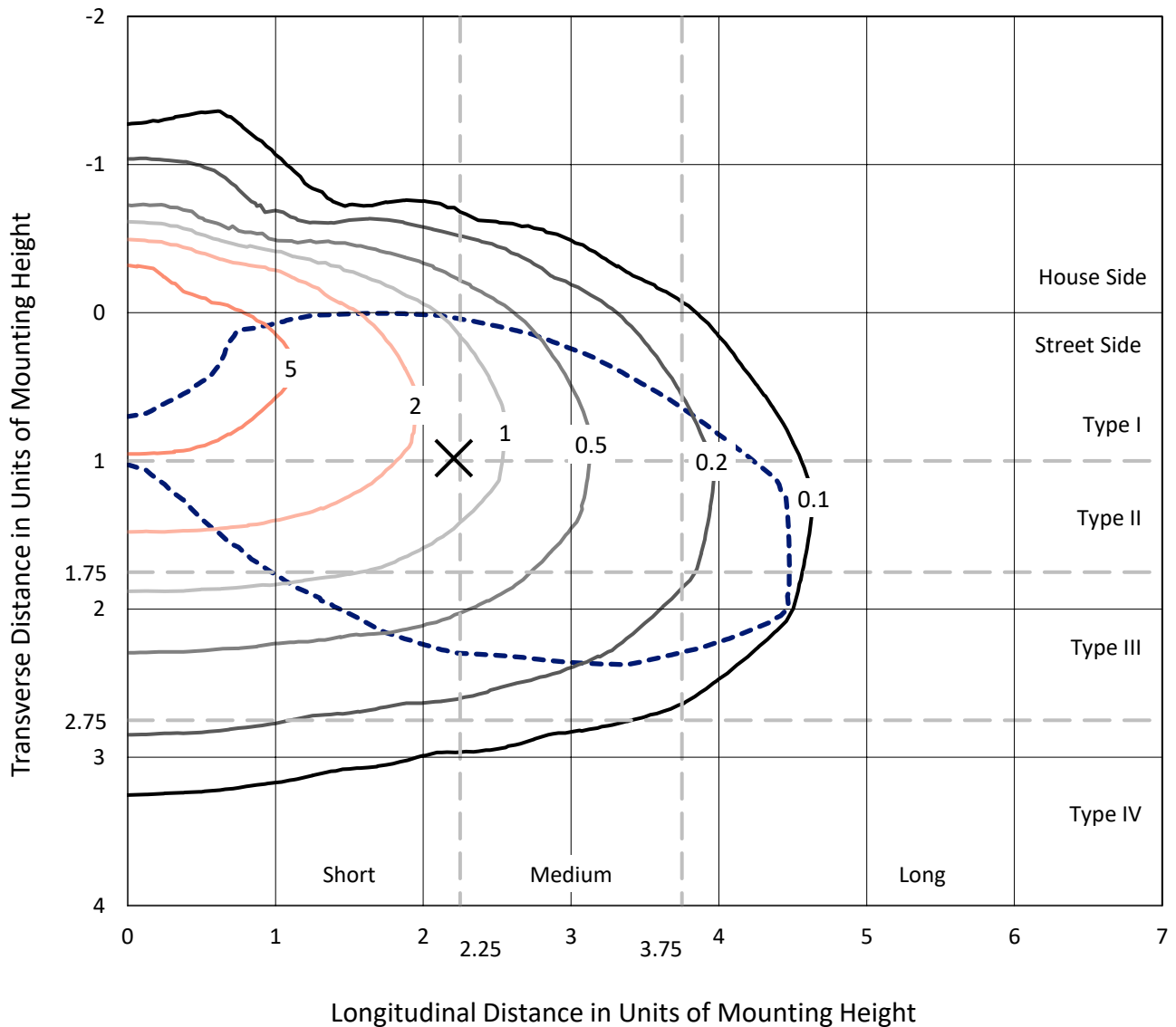
Input Watts (W): 227.8
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

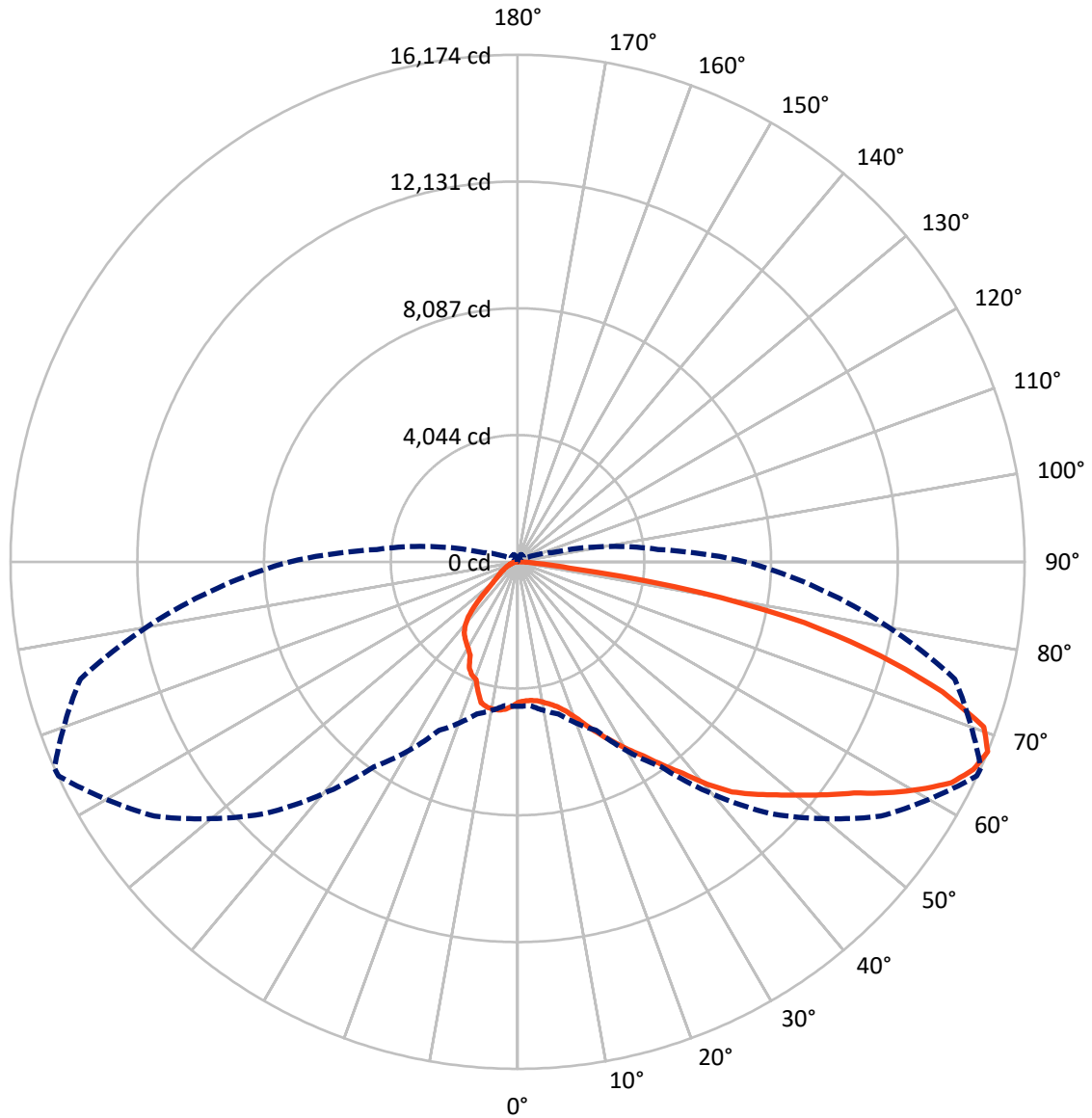
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 8 fc
 Type III - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 66-Deg Lateral - - - Horizontal Cone Through 67.5-Deg Vertical

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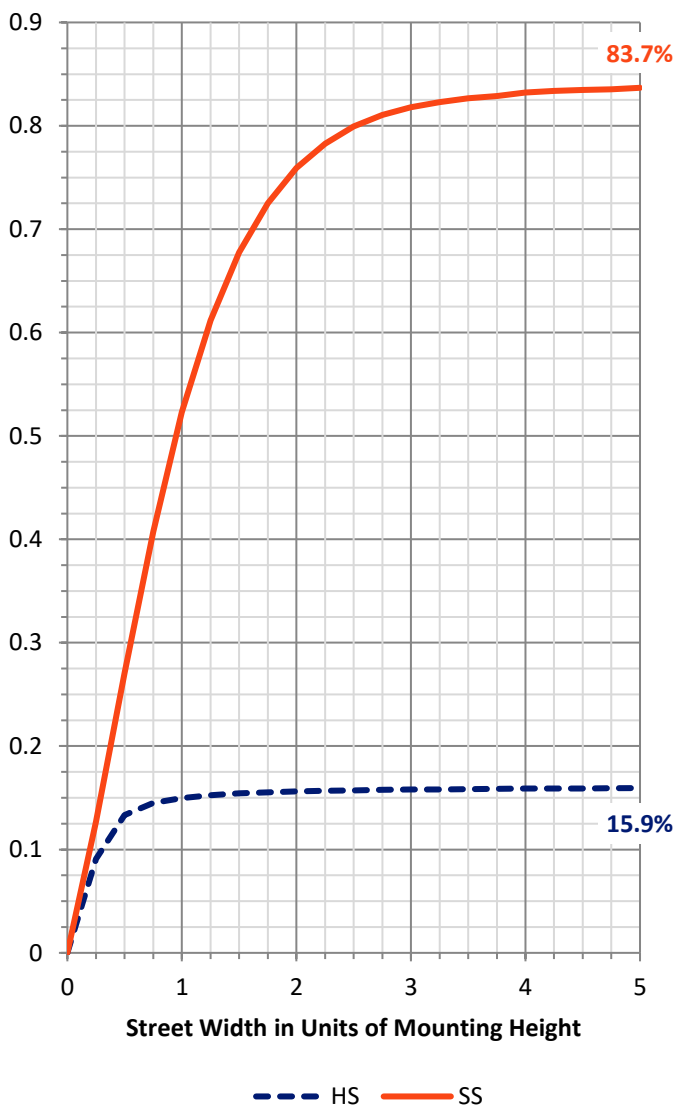
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	4126.1	0.0	4126.1
	% Fixture	16.1	0.0	16.1
Street Side	Lumens	21434.9	0.0	21434.9
	% Fixture	83.9	0.0	83.9
Total	Lumens	25561.0	0.0	25561.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	443.5	1.7
10°-20°	1337.2	5.2
20°-30°	2173.7	8.5
30°-40°	3175.2	12.4
40°-50°	4229.1	16.5
50°-60°	5115.8	20.0
60°-70°	5477.1	21.4
70°-80°	3250.4	12.7
80°-90°	358.9	1.4
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°	25561.0	100.0
0°-180°	25561.0	100.0

Coefficient of Utilization



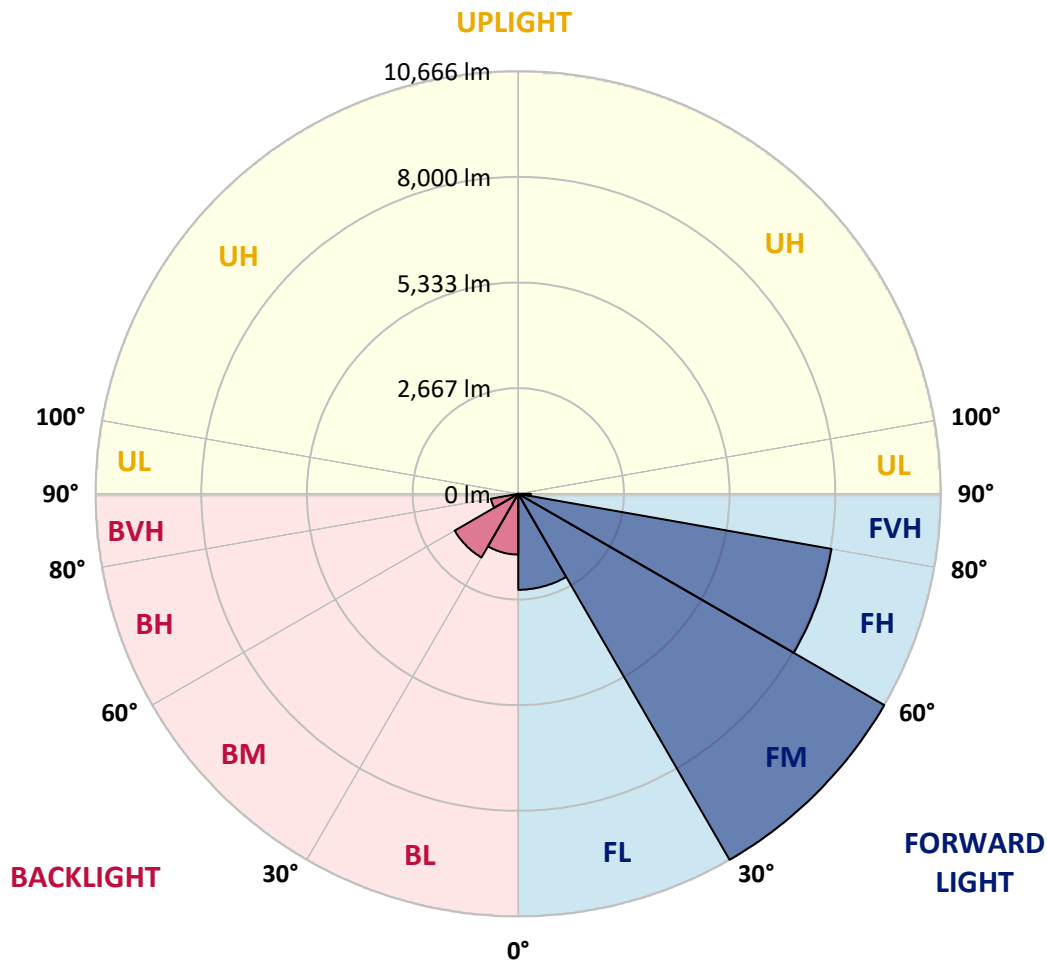
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	2422.1	9.5			
FM (30°-60°)	10666.1	41.7			
FH (60°-80°)	8028.6	31.4			G4/12000
FVH (80°-90°)	318.2	1.2			G3/500
BL (0°-30°)	1532.4	6.0	B3/2500		
BM (30°-60°)	1854.0	7.3	B2/2500		
BH (60°-80°)	698.9	2.7	B2/1000		G2/1000
BVH (80°-90°)	40.7	0.2			G1/100
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G4

Type III Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	66°	75°	85°
0°	4475.9	4475.9	4475.9	4475.9	4475.9	4475.9	4475.9	4475.9	4475.9	4475.9	4475.9
2.5°	4418.4	4393.4	4404.7	4434.1	4377.7	4413.5	4388.2	4432.5	4444.5	4449.4	4467.1
5°	4504.9	4471.9	4472.7	4491.2	4427.2	4442.9	4399.9	4430.9	4440.5	4453.4	4496.5
7.5°	4656.7	4620.0	4616.8	4621.6	4541.9	4524.2	4463.5	4469.9	4477.1	4484.8	4540.7
10°	4865.2	4827.7	4821.3	4808.8	4703.8	4657.5	4567.3	4553.2	4560.1	4547.6	4614.0
12.5°	5115.5	5070.4	5046.7	5010.9	4889.3	4816.9	4697.7	4659.1	4665.1	4639.0	4685.2
15°	5378.8	5330.9	5318.0	5262.8	5113.1	5014.1	4859.9	4801.2	4802.8	4772.6	4770.6
17.5°	5659.7	5617.1	5606.6	5571.6	5405.7	5287.8	5097.4	5017.7	5011.7	4981.9	4893.3
20°	5978.5	5951.5	5945.9	5925.8	5775.6	5637.6	5421.0	5314.0	5307.9	5260.8	5071.7
22.5°	6370.6	6338.8	6321.9	6304.5	6192.2	6048.5	5815.9	5665.0	5688.7	5609.4	5303.1
25°	6760.6	6735.2	6720.7	6709.5	6616.9	6480.8	6245.4	6068.3	6092.0	6007.1	5584.5
27.5°	7147.8	7091.9	7115.2	7141.8	7049.2	6940.9	6684.9	6492.1	6499.4	6407.6	5921.4
30°	7507.7	7478.3	7518.5	7543.5	7475.9	7391.3	7122.4	6936.1	6947.0	6837.9	6307.8
32.5°	7827.2	7785.0	7874.7	7923.4	7883.2	7813.6	7553.9	7377.2	7380.5	7314.4	6769.0
35°	8061.9	8064.7	8188.7	8319.5	8319.1	8220.9	8000.3	7918.2	7955.6	7926.3	7335.0
37.5°	8301.0	8279.7	8423.0	8617.4	8681.0	8593.6	8462.8	8511.5	8561.8	8652.0	7869.5
40°	8414.1	8414.9	8588.4	8813.0	8959.9	8943.4	8897.5	9223.2	9327.4	9354.4	7655.4
42.5°	8277.7	8287.3	8596.9	8994.1	9222.4	9309.7	9410.3	9965.0	10035.4	9882.9	7907.8
45°	8098.9	8112.2	8475.7	9056.5	9455.0	9700.9	9978.3	10519.2	10574.0	10371.1	8274.8
47.5°	7931.1	7955.6	8334.0	9019.1	9639.4	10141.7	10486.2	11041.3	11108.1	10840.5	8617.0
50°	7710.5	7765.3	8151.3	8919.7	9778.2	10525.3	10955.6	11669.6	11695.4	11298.5	8925.3
52.5°	7497.2	7513.3	7944.4	8792.5	9882.9	10873.1	11515.5	12315.3	12345.0	11800.0	9209.9
55°	7205.0	7229.1	7710.9	8633.1	9947.3	11164.5	12082.2	12988.3	13014.8	12402.6	9515.8
57.5°	6883.4	6901.1	7408.2	8388.3	9899.0	11423.3	12686.4	13835.9	13901.2	13022.5	9790.7
60°	6479.6	6503.0	7017.8	8049.0	9732.3	11725.2	13432.6	14742.0	14742.0	13591.6	10008.5
62.5°	5910.9	5943.5	6464.7	7560.4	9386.2	11899.9	14028.3	15530.9	15525.7	14040.0	10082.1
65°	5250.0	5255.2	5727.7	6872.9	8811.4	11806.9	14255.4	15991.8	15980.1	14364.4	9980.7
67.5°	4608.8	4603.1	5022.5	5932.6	7982.6	11349.2	14147.1	16160.1	16174.1	14442.5	9602.7
70°	3699.1	3691.8	4077.4	4821.3	6729.2	10363.5	13531.6	15733.0	15775.7	13996.5	8975.2
72.5°	2646.9	2636.1	2820.8	3312.7	4941.6	8525.2	11997.3	14091.5	14169.6	12568.0	7829.3
75°	1550.1	1561.7	1754.5	2037.5	2934.7	5608.2	9730.7	11834.3	11945.8	10691.5	6158.0
77.5°	862.2	859.8	1001.4	1214.4	1443.4	2808.7	6793.2	9319.8	9357.6	8377.9	4141.0
80°	416.2	414.2	452.4	570.8	823.1	1261.9	3336.4	5790.5	5905.3	5091.8	2024.6
82.5°	299.5	301.1	322.4	313.2	307.1	556.7	1113.3	1823.8	1665.2	1285.2	625.9
85°	225.0	225.0	244.3	225.4	220.2	283.4	541.4	651.7	625.5	572.0	371.9
87.5°	105.9	100.6	107.1	101.4	94.2	125.6	237.5	275.3	254.8	222.2	162.6
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°	4475.9	4475.9	4475.9	4475.9	4475.9	4475.9	4475.9	4475.9	4475.9	4475.9	4475.9
2.5°	4497.3	4506.1	4552.4	4612.8	4618.4	4670.3	4686.4	4750.8	4748.4	4730.7	4749.2
5°	4527.5	4554.4	4633.7	4718.6	4740.4	4805.6	4819.7	4882.9	4886.9	4865.2	4883.3
7.5°	4575.8	4615.2	4690.1	4774.2	4783.9	4841.8	4839.4	4899.4	4888.9	4870.0	4894.1
10°	4634.9	4665.5	4715.4	4771.0	4766.5	4812.8	4798.3	4841.4	4819.7	4804.4	4832.2
12.5°	4694.5	4695.7	4699.7	4734.7	4707.4	4717.8	4689.3	4721.1	4687.7	4661.9	4678.8
15°	4754.1	4720.3	4663.5	4641.8	4565.7	4526.6	4485.6	4523.8	4445.7	4404.7	4415.2
17.5°	4838.2	4756.9	4566.1	4290.0	4055.7	3926.5	3829.5	3754.6	3756.2	3793.3	3815.4
20°	4905.4	4596.3	4130.2	3959.5	3784.4	3548.1	3181.5	3080.8	3014.4	3013.2	3024.1
22.5°	4881.7	4426.4	4130.6	3863.7	3482.9	3010.8	2852.2	2760.0	2605.1	2273.8	2246.8
25°	5100.2	4577.0	4154.3	3665.7	3002.7	2763.2	2545.5	2366.4	1975.1	1913.5	1911.1
27.5°	5362.3	4780.2	4186.5	3238.2	2810.7	2487.5	2210.6	1777.9	1590.3	1563.8	1554.5
30°	5665.4	5019.7	3990.1	3101.4	2606.3	2166.7	1799.6	1365.3	1212.8	1203.5	1205.9
32.5°	6045.3	5293.0	3785.2	2988.7	2358.7	1795.2	1227.3	1041.3	954.0	858.6	889.1
35°	6450.3	5135.7	3907.6	2849.4	2048.8	1350.0	932.2	827.2	756.3	632.7	582.4
37.5°	6290.9	5243.9	4049.7	2696.4	1661.6	915.3	721.3	630.3	563.9	460.9	458.9
40°	6487.3	5553.9	4151.1	2450.1	1201.5	649.3	525.7	487.8	457.3	400.1	392.0
42.5°	6834.3	5824.3	4219.9	2134.1	718.1	483.0	448.8	454.4	427.9	384.0	378.8
45°	7176.0	6061.0	4155.1	1652.3	510.8	435.5	437.5	435.1	402.9	386.8	381.2
47.5°	7487.1	6261.1	3972.8	1090.0	443.2	424.7	429.1	418.2	382.0	372.7	371.9
50°	7754.4	6472.4	3145.6	835.2	426.3	410.2	419.8	402.1	339.7	329.7	319.2
52.5°	7919.0	6121.0	2794.6	641.6	408.5	387.6	390.4	404.9	320.0	254.8	238.7
55°	7894.1	5514.0	2598.2	534.1	380.4	356.2	361.9	385.2	289.4	199.2	180.3
57.5°	8012.8	5464.1	2394.5	454.4	328.0	322.8	311.5	351.0	263.2	132.0	125.2
60°	7993.5	5458.1	2136.9	357.4	289.8	271.3	257.2	285.8	188.8	49.1	44.7
62.5°	7962.1	5303.1	1844.3	320.4	266.9	259.6	247.5	279.7	160.6	34.2	25.4
65°	7804.7	5051.5	1512.6	280.6	249.2	234.3	233.5	264.9	132.4	18.9	8.5
67.5°	7267.4	4503.7	1125.4	258.4	238.7	231.0	245.1	255.2	127.2	19.3	7.6
70°	6599.2	3781.2	726.1	233.1	223.8	227.8	239.5	258.0	123.6	17.7	6.8
72.5°	5518.0	2925.1	440.3	208.1	202.5	214.5	236.3	258.0	114.3	14.9	5.6
75°	4197.8	1951.0	327.6	183.9	177.5	192.8	215.3	247.9	112.3	12.9	3.6
77.5°	2606.3	921.3	258.4	154.6	147.7	163.4	180.7	204.5	113.9	12.5	2.0
80°	1054.2	384.8	202.9	124.4	115.9	124.4	146.5	174.3	90.6	17.7	0.0
82.5°	443.6	270.9	165.8	99.0	92.6	81.7	99.8	129.2	71.2	14.1	0.0
85°	293.4	188.0	118.7	67.2	59.2	39.8	48.7	58.4	40.7	0.0	0.0
87.5°	132.8	83.3	51.9	22.9	19.3	10.9	6.4	5.6	0.0	0.0	0.0
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)