

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: P591437

Luminaire Tested: **CTN-CA6-230-740-U-T3-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591437
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-CA6-230-740-U-T3-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (6) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 20603 lumens
Efficiency: N/A
Efficacy: 90.4 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

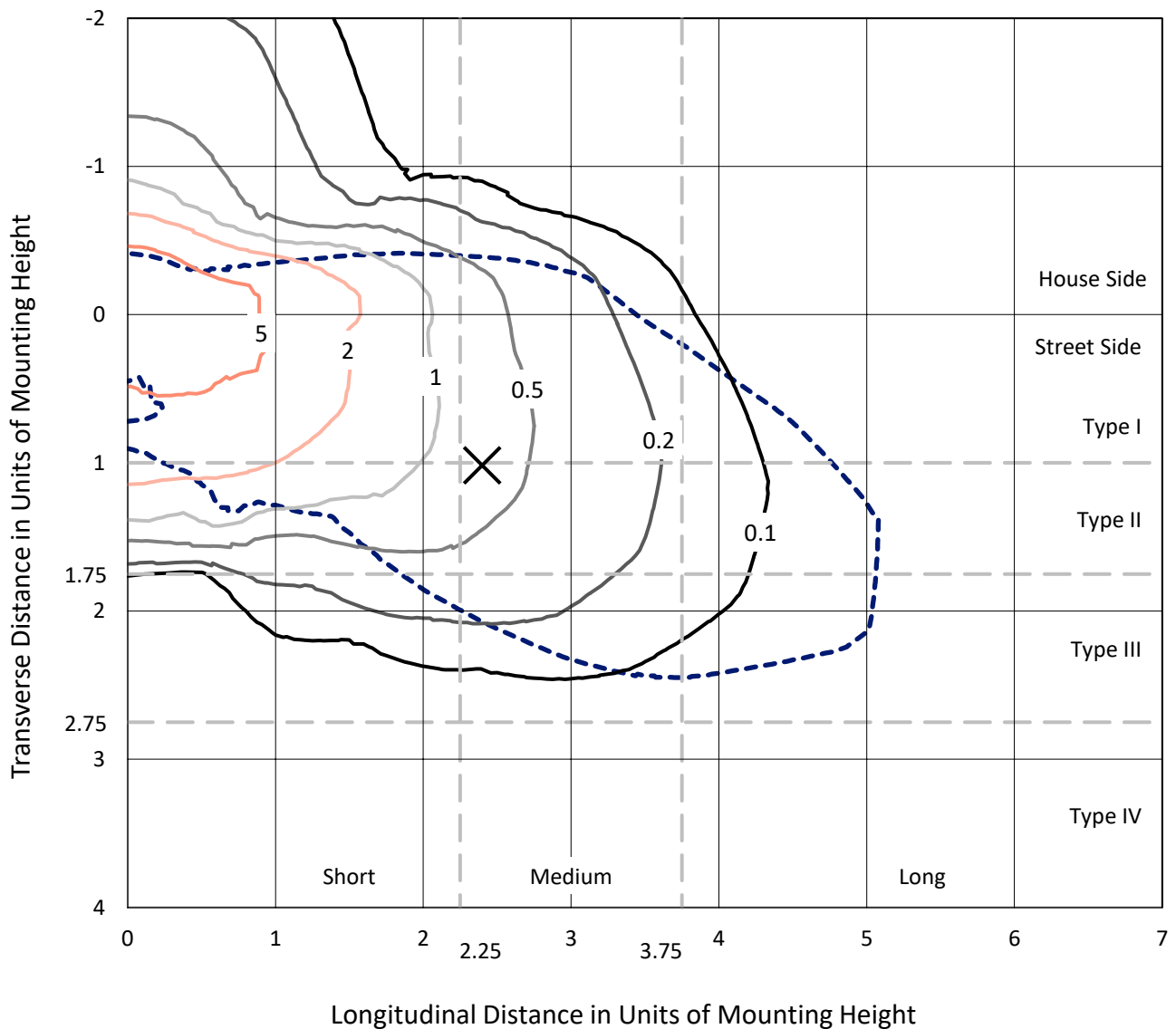




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Iso-Footcandle Lines of Horizontal Illumination

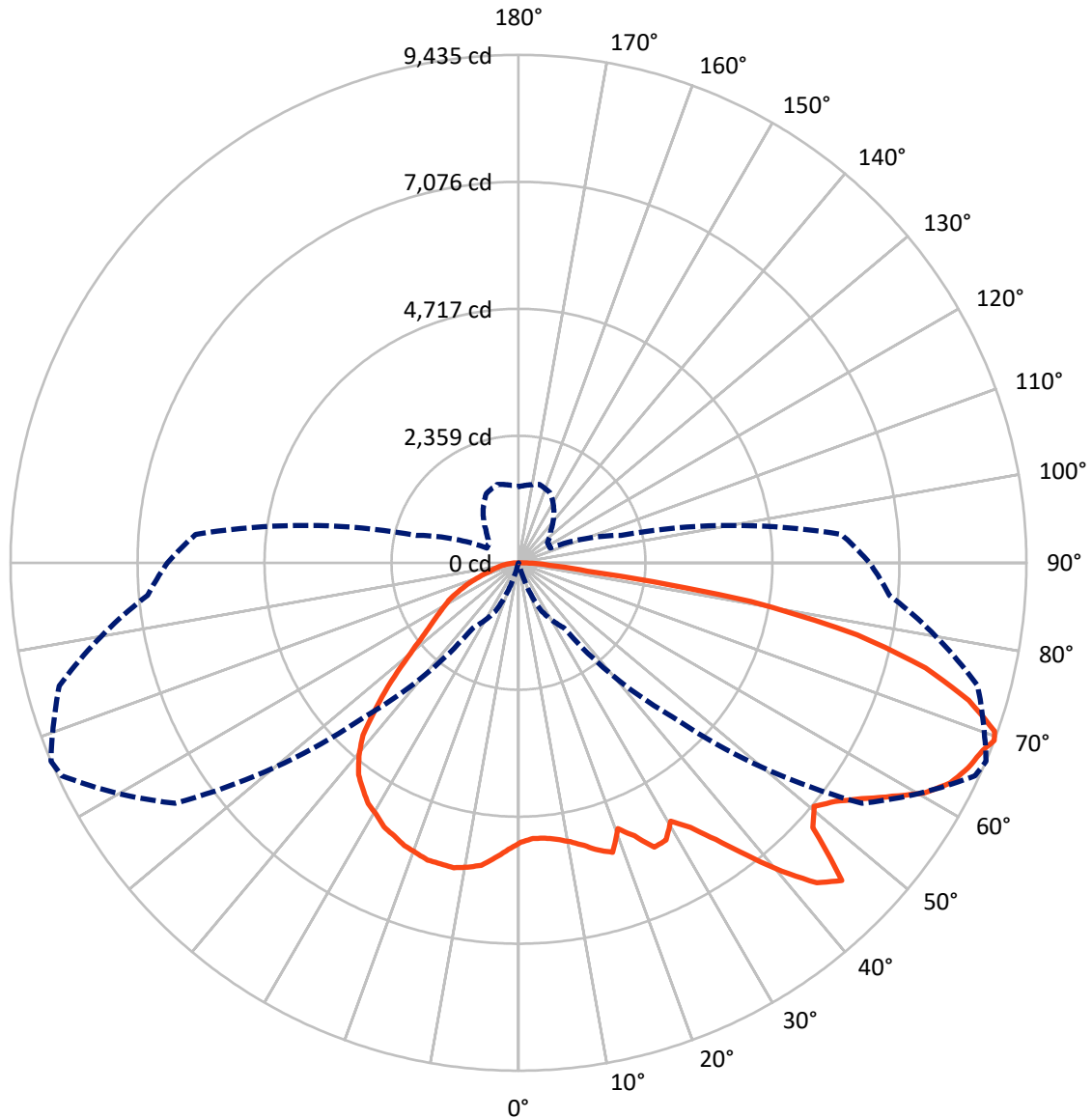
✕ Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.3 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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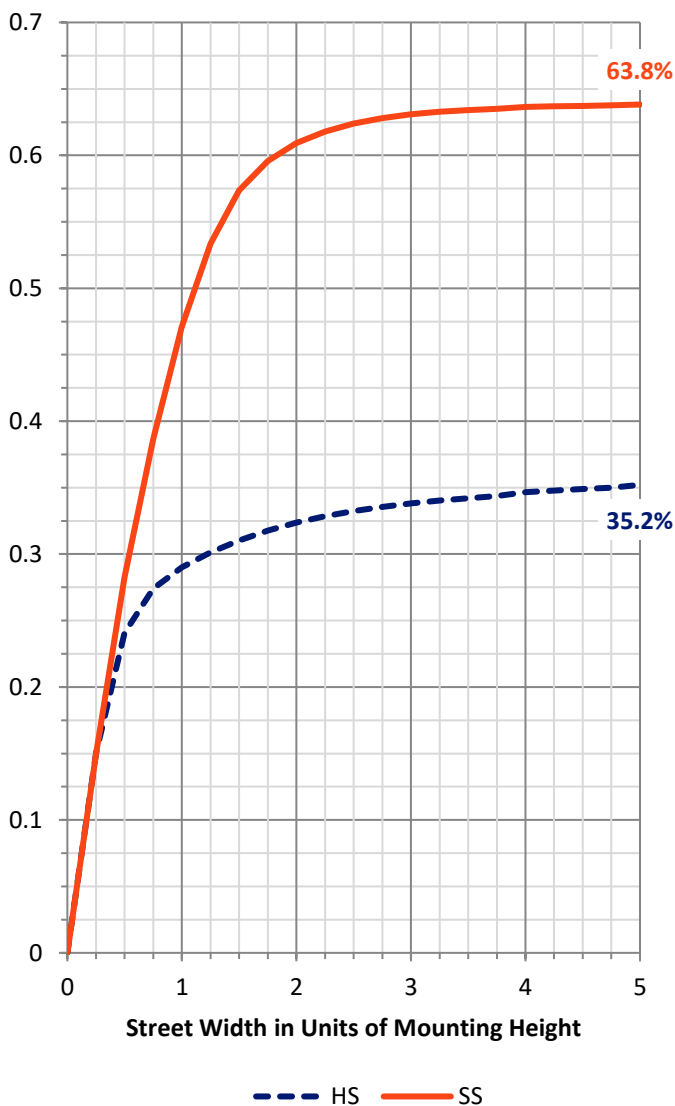
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	7453.6	0.0	7453.6
	% Fixture	36.2	0.0	36.2
Street Side	Lumens	13149.4	0.0	13149.4
	% Fixture	63.8	0.0	63.8
Total	Lumens	20603.0	0.0	20603.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	519.0	2.5
10°-20°	1602.4	7.8
20°-30°	2365.0	11.5
30°-40°	2971.5	14.4
40°-50°	3485.4	16.9
50°-60°	3647.2	17.7
60°-70°	3258.4	15.8
70°-80°	2293.3	11.1
80°-90°	460.6	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°	20603.0	100.0
0°-180°	20603.0	100.0

Coefficient of Utilization



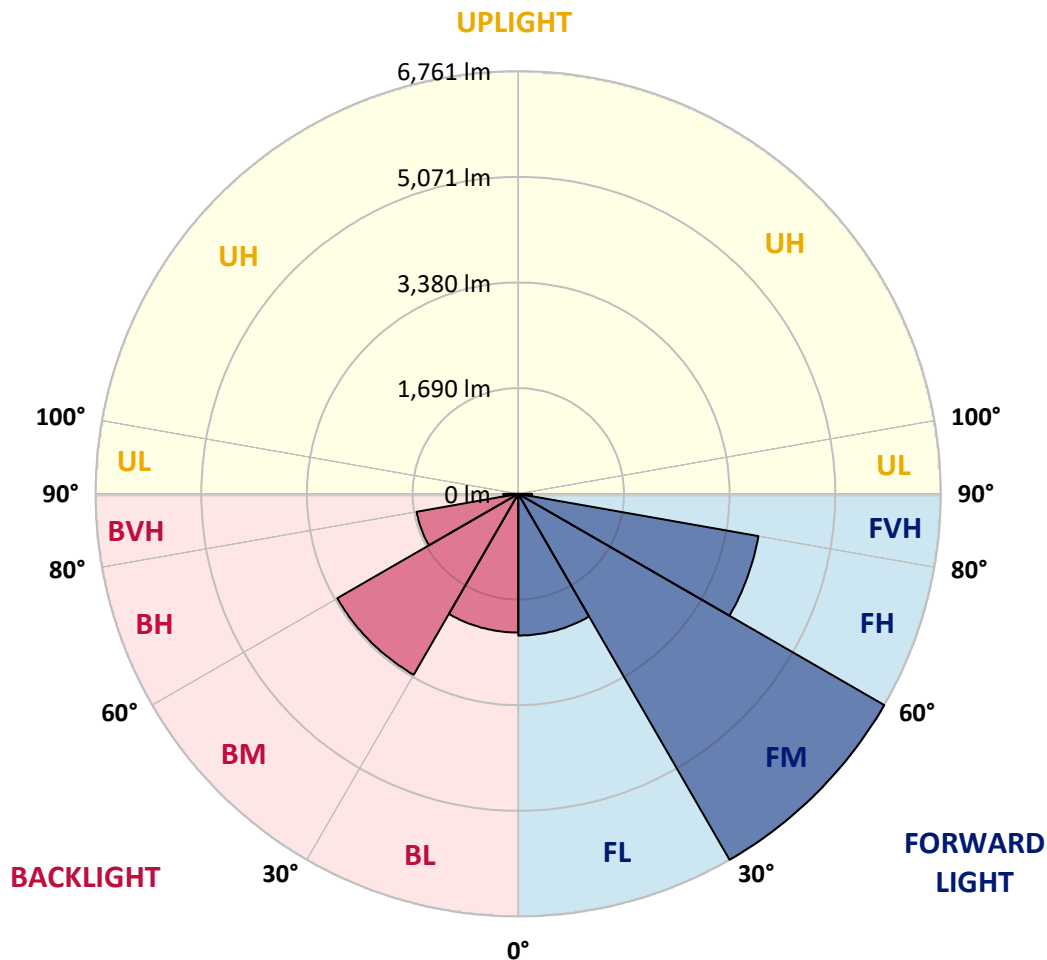
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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	2267.3	11.0			
FM	(30°-60°)	6761.0	32.8			
FH	(60°-80°)	3901.0	18.9			G2/5000
FVH	(80°-90°)	220.1	1.1			G2/225
BL	(0°-30°)	2219.2	10.8	B3/2500		
BM	(30°-60°)	3343.2	16.2	B3/5000		
BH	(60°-80°)	1650.7	8.0	B3/2500		G3/2500
BVH	(80°-90°)	240.5	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 III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	5190.1	5190.1	5190.1	5190.1	5190.1	5190.1	5190.1	5190.1	5190.1	5190.1	5190.1
2.5°	5066.5	5036.7	5050.6	5090.0	5008.0	5066.5	5045.2	5104.9	5127.2	5124.0	5209.2
5°	5107.0	5074.0	5079.3	5109.1	5019.7	5065.5	5045.2	5111.3	5136.8	5129.4	5245.4
7.5°	5250.8	5214.6	5202.8	5212.4	5115.5	5150.7	5107.0	5160.3	5187.9	5187.9	5320.0
10°	5477.6	5433.9	5408.4	5407.3	5293.4	5277.4	5224.1	5248.6	5268.9	5285.9	5432.9
12.5°	5715.0	5678.8	5645.8	5627.7	5477.6	5440.3	5362.6	5380.7	5387.1	5410.5	5556.4
15°	5931.2	5895.0	5885.4	5856.7	5707.6	5645.8	5537.2	5528.7	5537.2	5551.1	5695.9
17.5°	5848.1	5850.3	5903.5	5908.8	5715.0	5572.3	5496.7	5640.5	5654.3	5764.0	5857.7
20°	5690.5	5612.8	5333.8	5181.5	5203.9	5389.2	5251.8	5245.4	5274.2	5469.1	5944.0
22.5°	4739.6	4697.0	4850.4	4899.4	5076.1	5146.4	5473.3	5481.8	5510.6	5510.6	5649.0
25°	4092.2	4312.6	4610.8	5143.2	5087.8	5101.7	5234.8	5800.2	5854.5	5853.5	5833.2
27.5°	4230.6	4203.0	4649.1	4983.5	5378.5	5354.1	5209.2	5593.6	5834.3	6247.5	6151.6
30°	4396.8	4376.5	4409.5	4975.0	5629.8	5662.9	5528.7	5489.3	5571.3	6439.1	6515.8
32.5°	4551.2	4526.7	4563.9	4650.2	5277.4	5981.2	5878.0	5830.0	5859.9	6034.5	6984.3
35°	4687.5	4685.3	4727.9	4830.1	5364.7	6092.0	6235.7	6232.6	6312.4	6462.6	7052.5
37.5°	4784.4	4783.3	4817.4	4936.6	5057.0	5626.7	6571.2	6761.8	6889.6	7112.1	6889.6
40°	4783.3	4800.3	4889.8	5043.1	5202.8	5374.3	6719.2	7383.7	7537.0	7695.7	7325.1
42.5°	4683.2	4692.8	4850.4	5134.7	5332.8	5480.8	6131.4	7955.5	8126.9	8115.2	7668.0
45°	4590.6	4594.8	4770.5	5119.8	5441.4	5708.6	6011.1	7953.3	8416.6	8489.0	7990.6
47.5°	4470.2	4470.2	4643.8	5033.5	5539.3	5965.3	6332.6	6870.4	7353.8	8812.7	8257.9
50°	4315.8	4335.0	4122.0	4944.1	5586.2	6209.1	6605.2	7048.2	7115.3	7880.9	8506.0
52.5°	4069.8	4059.2	3221.2	4845.1	5605.4	6385.9	6888.5	7326.2	7362.4	7285.7	8263.2
55°	2565.2	2860.2	2848.5	4729.0	5593.6	6499.8	7105.7	7631.8	7734.0	7640.3	6951.3
57.5°	1549.4	1479.1	2434.2	4396.8	4492.6	6588.2	7400.7	8096.0	8185.5	7968.3	7068.5
60°	604.8	570.8	616.5	2000.8	3223.3	6129.3	7802.1	8589.1	8674.2	8280.3	7167.5
62.5°	75.6	65.0	55.4	1385.4	2048.8	4553.3	8015.1	8986.2	9002.2	8506.0	7186.7
65°	10.6	11.7	21.3	1235.2	1861.4	4475.6	8089.6	9148.1	9181.1	8668.9	7121.7
67.5°	4.3	5.3	17.0	1074.4	1633.5	4269.0	7905.4	9259.9	9298.2	8826.5	7058.9
69°	4.3	5.3	17.0	965.8	1478.0	4041.1	7787.2	9358.9	9434.5	8829.7	6915.1
70°	4.3	5.3	16.0	888.1	1356.6	3848.4	7673.3	9320.6	9381.3	8744.5	6755.4
72.5°	4.3	5.3	16.0	683.6	1031.8	3090.2	6952.4	8777.5	8746.7	8207.8	6133.5
75°	5.3	5.3	16.0	480.2	715.6	2197.8	5867.3	7794.7	7808.5	7307.0	5159.2
77.5°	5.3	5.3	16.0	305.6	451.5	1271.4	4248.7	6392.3	6431.7	6087.7	3863.3
80°	5.3	5.3	16.0	139.5	280.1	664.5	2089.2	4165.7	4377.6	4086.9	2120.1
82.5°	5.3	5.3	14.9	87.3	153.3	299.2	824.2	1306.6	1293.8	1273.6	674.0
85°	4.3	4.3	11.7	61.8	102.2	173.6	457.9	585.7	578.2	512.2	348.2
87.5°	2.1	2.1	6.4	25.6	42.6	78.8	228.9	266.2	253.4	217.2	149.1
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°	5190.1	5190.1	5190.1	5190.1	5190.1	5190.1	5190.1	5190.1	5190.1	5190.1	5190.1
2.5°	5248.6	5256.1	5291.2	5337.0	5350.9	5410.5	5420.1	5518.0	5532.9	5557.4	5568.1
5°	5301.9	5330.6	5407.3	5514.8	5606.4	5700.1	5703.3	5822.6	5853.5	5847.1	5878.0
7.5°	5377.5	5425.4	5542.5	5691.6	5724.6	5846.0	5837.5	5955.7	5957.8	5940.8	5987.6
10°	5493.5	5553.2	5659.7	5751.2	5814.1	5892.9	5882.2	5994.0	5978.1	5960.0	6012.1
12.5°	5612.8	5643.7	5708.6	5810.9	5824.7	5852.4	5838.6	5941.8	5924.8	5902.5	5953.6
15°	5717.2	5732.1	5732.1	5787.4	5752.3	5774.7	5727.8	5810.9	5771.5	5760.8	5809.8
17.5°	5852.4	5827.9	5777.9	5773.6	5682.0	5648.0	5577.7	5600.0	5525.5	5532.9	5558.5
20°	6004.7	5950.4	5818.3	5686.3	5517.0	5436.0	5296.6	5285.9	5216.7	5203.9	5228.4
22.5°	6061.1	6109.0	5867.3	5611.7	5320.0	5139.0	4973.9	4895.1	4793.9	4729.0	4737.5
25°	6232.6	6318.8	5941.8	5478.6	5087.8	4789.7	4541.6	4361.6	4209.3	4131.6	4147.6
27.5°	6464.7	6605.2	5984.4	5386.0	4783.3	4393.6	3978.3	3741.9	3584.3	3503.3	3501.2
30°	6796.9	6973.7	6066.4	5192.2	4444.7	3872.9	3360.7	3081.7	2952.8	2899.6	2903.8
32.5°	7212.2	7425.2	6236.8	5030.3	4076.2	3315.9	2732.4	2488.5	2430.0	2420.4	2415.1
35°	7762.7	7973.6	6372.0	4781.2	3598.1	2684.5	2193.6	2021.1	2030.7	2028.5	2034.9
37.5°	7673.3	8473.0	6526.5	4537.3	3026.3	2104.1	1773.0	1676.1	1679.3	1716.5	1724.0
40°	7336.8	8036.4	6756.5	4133.7	2357.6	1616.4	1398.1	1375.8	1467.4	1549.4	1564.3
42.5°	7600.9	7773.4	6787.3	3698.2	1725.1	1239.5	1169.2	1261.8	1409.9	1504.6	1521.7
45°	7865.0	8004.5	6608.4	3046.5	1237.4	1060.6	1112.8	1245.9	1409.9	1511.0	1522.7
47.5°	8133.3	8132.2	6399.7	2442.8	1011.6	1013.7	1098.9	1246.9	1418.4	1520.6	1527.0
50°	8303.7	8235.5	5854.5	1913.5	941.3	986.0	1091.5	1253.3	1416.2	1490.8	1494.0
52.5°	8388.9	8287.7	5373.2	1529.1	908.3	963.7	1092.5	1268.2	1404.5	1446.1	1443.9
55°	8245.1	8259.0	4975.0	1271.4	877.4	945.6	1097.9	1278.9	1409.9	1452.5	1452.5
57.5°	8066.2	8069.4	4657.6	1076.6	846.6	930.7	1104.2	1294.9	1507.8	1587.7	1576.0
60°	7940.6	7796.8	4208.3	954.1	811.4	916.8	1112.8	1364.1	1737.8	1818.8	1791.1
62.5°	7734.0	7539.1	3746.1	868.9	772.0	906.2	1118.1	1461.0	1768.7	1773.0	1704.8
65°	7371.9	7092.9	3024.2	784.8	731.6	891.3	1114.9	1497.2	1629.2	1565.3	1546.2
67.5°	6848.0	6483.9	2370.4	700.7	686.8	868.9	1136.2	1431.2	1538.7	1486.5	1461.0
69°	6521.1	6021.7	1967.8	650.6	658.1	851.9	1146.8	1418.4	1506.8	1442.9	1413.1
70°	6273.0	5621.3	1666.5	617.6	633.6	837.0	1125.5	1410.9	1491.9	1413.1	1377.9
72.5°	5326.4	4519.2	1067.0	540.9	569.7	799.7	1068.0	1364.1	1458.8	1405.6	1361.9
75°	4117.8	3319.1	680.4	470.7	504.7	744.3	1008.4	1331.1	1473.7	1377.9	1282.1
77.5°	2771.8	1853.9	519.6	395.1	428.1	671.9	913.6	1238.4	1422.6	1338.5	1220.3
80°	1262.9	707.1	401.4	320.5	346.1	540.9	788.0	1095.7	1344.9	1343.8	1258.6
82.5°	505.8	472.8	298.2	244.9	272.6	403.6	624.0	938.1	1186.2	1237.4	1321.5
85°	295.0	298.2	198.1	170.4	203.4	297.1	445.1	725.2	964.8	1067.0	1138.3
87.5°	120.3	134.2	92.6	89.4	111.8	158.7	204.5	351.4	519.6	637.8	681.5
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)