

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: P510731

Luminaire Tested: **CTN-CA8-230-740-U-T4**

Issue Date: 4/6/2021

Test Information

Test Method: LM-79-08
Report Number: P510731
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-12)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 4/6/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA8-230-740-U-T4
Description: CELESTEON HIGH MAST LUMINAIRE
Light Source: (8) 4000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 35369 lumens
Efficiency: N/A
Efficacy: 154.9 lumens/watt
Luminous Opening: Circular (Dia: 2.08' x H: 0')
IES Classification: Type IV - Short
BUG Rating: B3 - U0 - G5

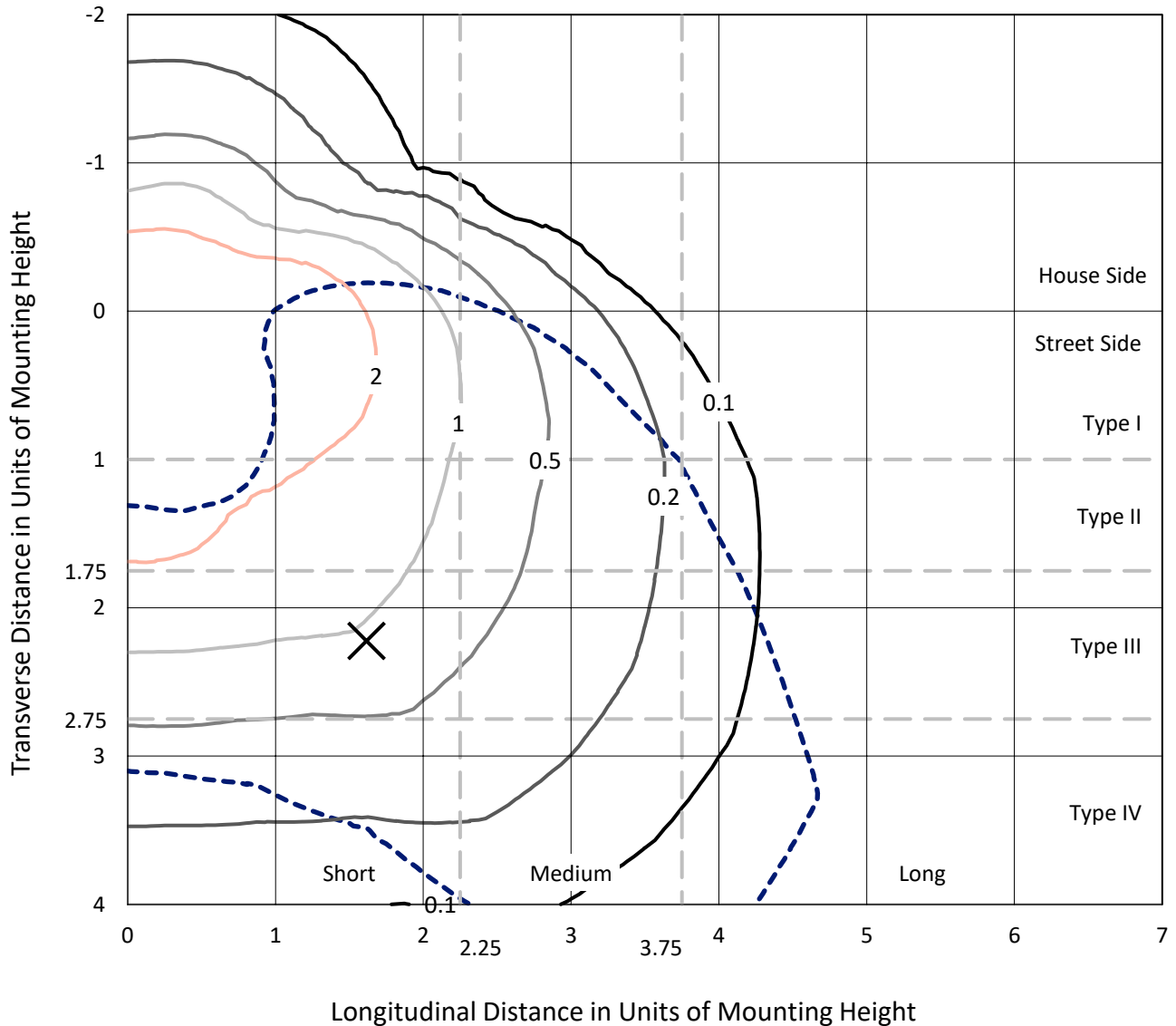
Input Watts (W): 228.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



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Iso-Footcandle Lines of Horizontal Illumination

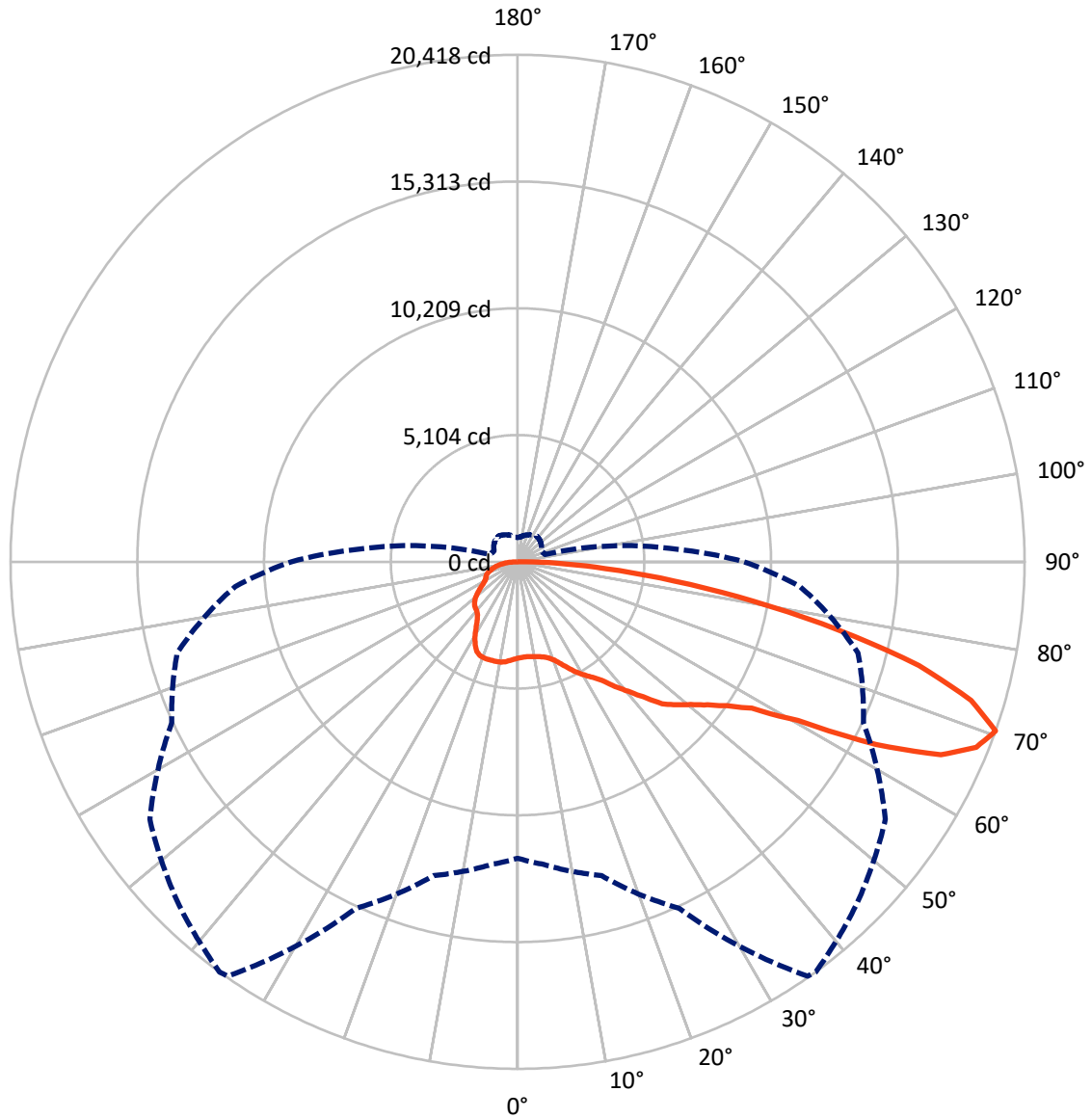
✕ Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 4.5 fc
 Type IV - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral - - - Horizontal Cone Through 70-Deg Vertical

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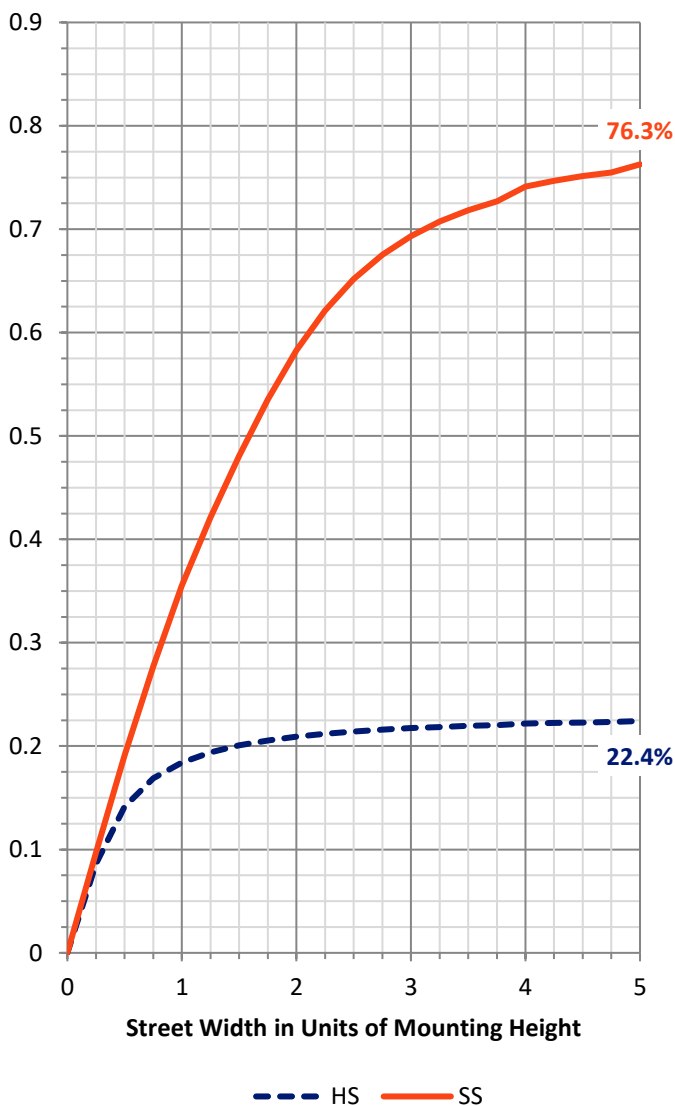
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	8058.6	0.0	8058.6
	% Fixture	22.8	0.0	22.8
Street Side	Lumens	27310.4	0.0	27310.4
	% Fixture	77.2	0.0	77.2
Total	Lumens	35369.0	0.0	35369.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	375.3	1.1
10°-20°	1160.3	3.3
20°-30°	2092.9	5.9
30°-40°	3241.5	9.2
40°-50°	4923.9	13.9
50°-60°	6824.8	19.3
60°-70°	8874.6	25.1
70°-80°	6553.8	18.5
80°-90°	1321.8	3.7
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°	35369.0	100.0
0°-180°	35369.0	100.0

Coefficient of Utilization

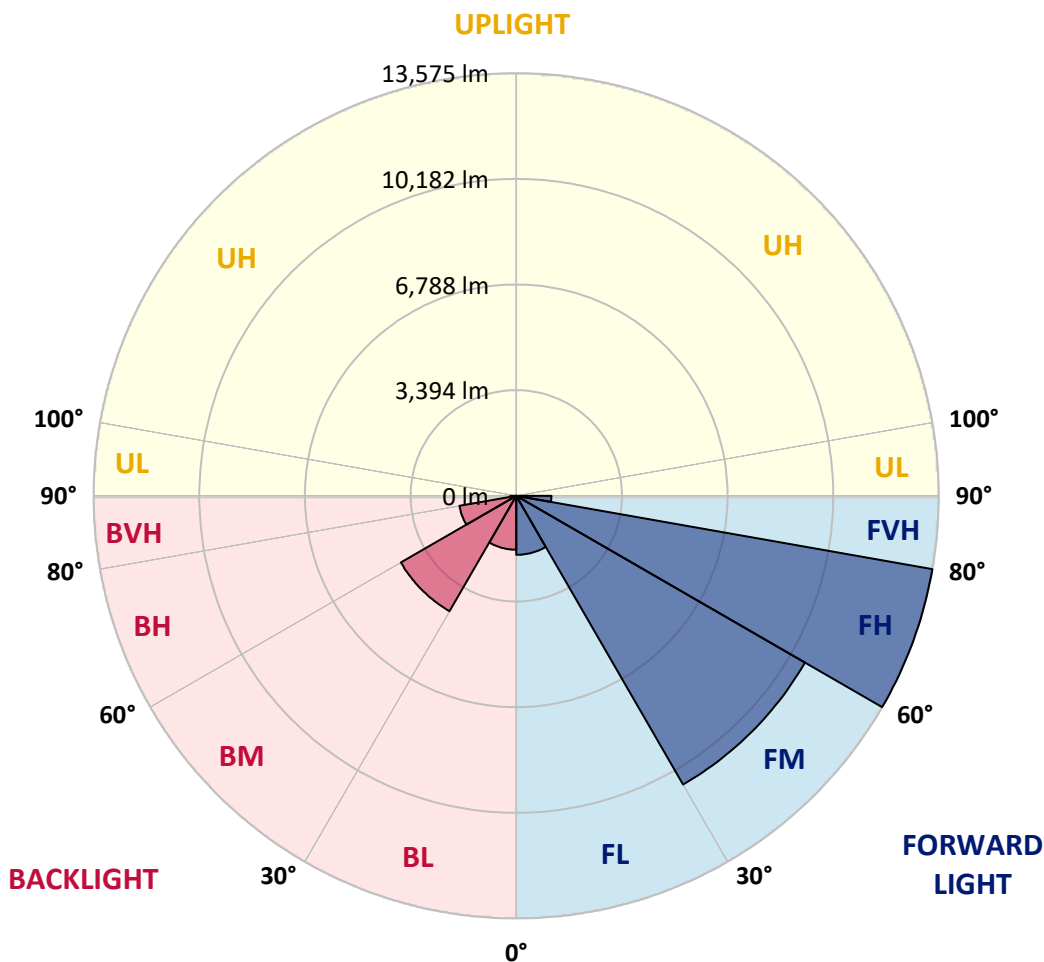


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1896.1	5.4			
FM (30°-60°)	10709.6	30.3			
FH (60°-80°)	13575.4	38.4			G5
FVH (80°-90°)	1129.2	3.2			G5
BL (0°-30°)	1732.4	4.9	B3/2500		
BM (30°-60°)	4280.6	12.1	B3/5000		
BH (60°-80°)	1853.1	5.2	B3/2500		G3/2500
BVH (80°-90°)	192.6	0.5			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B3-U0-G5
 Type IV Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	3874.0	3874.0	3874.0	3874.0	3874.0	3874.0	3874.0	3874.0	3874.0	3874.0	3874.0
2.5°	3850.5	3845.4	3842.5	3848.3	3850.5	3851.3	3852.7	3851.3	3847.6	3860.8	3876.9
5°	3851.3	3848.3	3842.5	3837.3	3837.3	3837.3	3838.1	3854.9	3862.2	3860.8	3880.6
7.5°	3857.1	3854.9	3843.9	3840.3	3849.1	3852.0	3866.6	3861.5	3869.6	3882.7	3899.6
10°	3857.8	3854.9	3845.4	3853.5	3878.4	3882.7	3889.3	3904.0	3906.9	3923.0	3939.9
12.5°	3865.2	3865.2	3868.8	3886.4	3912.8	3917.9	3942.8	3954.5	3972.1	3980.1	4000.7
15°	3904.0	3903.3	3912.0	3931.8	3974.3	3977.2	4008.0	4043.1	4056.3	4076.1	4109.0
17.5°	3996.3	4000.7	4001.4	4016.0	4066.6	4068.0	4118.6	4151.5	4181.5	4216.7	4292.1
20°	4215.2	4207.2	4198.4	4198.4	4218.1	4228.4	4267.2	4319.9	4381.5	4443.7	4532.3
22.5°	4490.6	4506.7	4474.5	4457.6	4467.1	4455.4	4484.7	4527.2	4599.0	4692.0	4804.0
25°	4819.4	4820.8	4818.6	4750.5	4729.3	4736.6	4760.8	4800.3	4895.5	4969.5	5132.1
27.5°	5140.1	5133.5	5110.1	5038.3	5017.8	5028.1	5027.4	5136.5	5233.9	5328.3	5519.5
30°	5431.6	5449.2	5407.4	5286.6	5288.8	5287.3	5321.0	5461.6	5639.6	5815.3	6011.6
32.5°	5945.7	5892.2	5835.8	5597.1	5553.2	5548.0	5567.8	5777.3	6040.9	6337.5	6573.3
35°	6429.7	6416.6	6360.9	6118.5	5864.4	5860.0	5832.9	6087.8	6458.3	7007.5	7301.9
37.5°	6924.8	6905.8	6850.8	6644.3	6391.7	6367.5	6139.8	6418.8	6919.7	7791.1	8210.7
40°	7515.0	7503.3	7418.4	7154.0	6894.8	6858.2	6621.6	6766.6	7501.9	8834.7	9130.5
42.5°	8032.8	8030.6	7933.2	7687.9	7467.4	7430.8	7229.4	7380.3	8311.1	9857.0	10031.3
45°	8412.9	8470.7	8475.1	8335.2	8182.9	8150.7	8097.2	8305.2	9247.0	10784.8	10759.2
47.5°	8733.6	8783.4	8731.4	8659.7	8607.7	8609.9	8692.6	9105.6	10171.2	11593.3	11394.1
50°	9269.7	9238.9	8968.7	8926.2	8992.1	9030.9	9271.1	9969.8	11229.4	12352.0	11963.9
52.5°	10043.0	9925.1	9394.9	9308.5	9558.2	9572.9	9955.1	10742.4	12286.8	13003.0	12485.3
55°	11101.2	11003.8	10404.8	10005.7	10131.6	10230.5	10768.7	11534.0	13150.2	13615.2	12886.6
57.5°	12665.4	12672.8	12184.3	11440.3	11011.9	11117.3	11537.7	12303.7	13863.5	14127.9	13137.0
60°	13919.2	14151.3	14005.6	13665.8	13050.6	12978.9	12658.8	13105.6	14472.8	14563.6	13376.5
62.5°	14788.4	14893.9	15394.8	15466.5	16169.6	16199.6	14666.9	14045.1	15142.1	14849.2	13427.0
65°	14744.5	14809.7	15601.3	16565.0	18641.9	18734.9	17837.8	15466.5	15600.6	14976.6	13279.8
67.5°	13717.8	13815.9	14822.1	16623.6	19959.3	19924.2	19355.2	17445.3	15751.4	14772.3	12578.3
70°	11934.6	12237.0	13082.1	15388.2	20370.9	20417.7	19369.1	18077.3	15362.6	14194.5	11408.8
72.5°	9836.5	9931.7	10729.9	13310.6	19167.7	19098.8	18575.2	17243.1	14659.5	13149.5	9361.9
75°	7480.6	7480.6	8447.3	10607.6	16460.3	16702.0	16905.6	15617.4	12986.9	10717.5	6374.8
77.5°	4965.8	5143.8	5922.3	7971.3	13029.4	13208.1	13911.1	13312.1	10633.3	7859.2	2911.7
80°	2634.1	2656.1	3491.0	5296.9	9319.5	9656.3	10623.0	10267.1	7648.3	3682.1	736.0
82.5°	921.3	1005.5	1534.9	3069.9	6140.5	6350.7	7047.1	6100.9	2701.5	815.1	407.2
85°	457.7	473.8	675.9	1461.7	3457.3	3559.1	4117.1	2376.4	435.0	355.9	276.8
87.5°	220.4	225.6	259.2	522.9	1502.7	1572.3	1664.6	773.3	161.1	135.5	120.1
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°	3874.0	3874.0	3874.0	3874.0	3874.0	3874.0	3874.0	3874.0	3874.0	3874.0	3874.0
2.5°	3880.6	3887.1	3899.6	3903.3	3894.5	3910.6	3926.0	3939.9	3939.1	3944.3	3962.6
5°	3889.3	3903.3	3916.4	3939.9	3962.6	3975.8	3988.2	3999.9	4003.6	4014.6	4025.5
7.5°	3916.4	3930.3	3960.4	4001.4	4002.8	4035.8	4057.0	4060.7	4063.6	4063.6	4089.3
10°	3958.2	3983.8	4032.1	4060.7	4086.3	4075.3	4097.3	4083.4	4073.2	4077.5	4095.1
12.5°	4029.9	4052.6	4122.2	4153.7	4130.3	4125.9	4103.9	4072.4	4036.5	4032.9	4049.0
15°	4142.7	4185.2	4247.4	4277.5	4218.9	4166.9	4092.9	4028.5	3958.9	3933.3	3943.5
17.5°	4324.3	4375.6	4443.7	4423.2	4316.3	4213.8	4091.5	3955.2	3820.5	3726.8	3750.9
20°	4590.2	4628.2	4683.9	4601.2	4445.2	4276.0	4075.3	3860.0	3632.3	3461.7	3441.9
22.5°	4869.2	4927.0	4893.3	4740.3	4536.0	4300.2	4041.7	3721.6	3369.4	3155.6	3123.3
25°	5205.3	5224.4	5107.9	4877.2	4561.6	4262.1	3932.5	3519.5	3100.6	2899.2	2889.7
27.5°	5562.0	5518.7	5302.0	4940.2	4533.0	4149.3	3713.6	3200.2	2857.5	2679.6	2651.7
30°	5964.7	5864.4	5462.4	4946.8	4425.4	3929.6	3436.8	2950.5	2659.8	2481.1	2452.5
32.5°	6483.2	6246.7	5611.0	4878.7	4198.4	3607.4	3104.3	2737.4	2481.8	2302.4	2276.8
35°	7146.0	6746.8	5768.5	4755.7	3918.6	3285.2	2828.9	2556.5	2337.6	2121.5	2087.1
37.5°	7909.8	7444.7	5956.7	4600.4	3611.8	3001.8	2642.9	2441.5	2230.6	1986.0	1945.0
40°	8797.3	8143.4	6246.7	4415.1	3336.4	2797.5	2552.9	2402.0	2171.3	1916.5	1869.6
42.5°	9566.3	8882.3	6591.6	4216.0	3076.5	2627.6	2512.6	2375.6	2134.0	1864.5	1811.0
45°	10277.3	9492.3	6928.5	3974.3	2802.6	2511.1	2464.2	2309.7	2068.1	1800.0	1744.4
47.5°	10855.1	9985.2	7221.4	3752.4	2583.6	2404.2	2358.8	2184.5	1957.5	1722.4	1681.4
50°	11298.9	10355.7	7381.8	3575.9	2352.2	2282.6	2222.6	2043.2	1824.9	1622.1	1586.9
52.5°	11753.0	10727.0	7460.9	3584.7	2136.9	2101.8	2040.2	1886.5	1719.5	1563.5	1525.4
55°	12017.3	10879.3	7377.4	3371.6	1939.2	1898.2	1844.7	1764.9	1665.3	1526.9	1491.0
57.5°	12171.9	10973.8	7123.3	2749.9	1701.2	1662.4	1671.1	1664.6	1582.5	1436.8	1403.9
60°	12283.2	10768.7	6602.6	2021.2	1498.3	1469.0	1541.5	1518.1	1447.1	1333.6	1305.7
62.5°	12193.1	10378.4	5665.2	1519.6	1332.8	1395.1	1458.8	1415.6	1318.9	1215.6	1183.4
65°	11643.8	9612.4	4306.0	1220.8	1279.4	1365.0	1416.3	1346.7	1248.6	1126.3	1111.7
67.5°	10644.2	8223.9	2539.7	1119.0	1239.1	1329.9	1372.4	1280.1	1193.7	1076.5	1058.9
70°	9118.8	6156.6	1134.4	1042.1	1168.8	1258.9	1286.7	1199.5	1105.8	996.0	978.4
72.5°	6787.1	3712.1	764.5	962.3	1064.8	1144.6	1175.4	1083.1	1016.5	966.7	961.5
75°	3769.2	1288.9	705.2	871.5	951.3	1023.0	1061.1	996.0	943.2	875.1	847.3
77.5°	1200.3	547.8	670.1	779.2	880.2	939.6	933.7	835.6	818.7	736.0	728.7
80°	478.9	477.5	619.5	637.8	751.4	801.2	788.0	664.2	686.2	637.8	618.8
82.5°	375.7	437.2	496.5	487.0	584.4	643.0	624.7	487.7	551.4	506.8	463.6
85°	285.6	383.0	318.6	317.1	407.9	477.5	489.2	374.9	375.7	342.0	304.6
87.5°	147.2	141.3	122.3	121.6	136.2	194.1	238.0	213.1	168.4	126.7	121.6
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)