

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: P591263

Luminaire Tested: **CTN-CA8-330-727-U-T1-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591263
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-2)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA8-330-727-U-T1-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (8) 2700K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 24115 lumens
Efficiency: N/A
Efficacy: 72.7 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

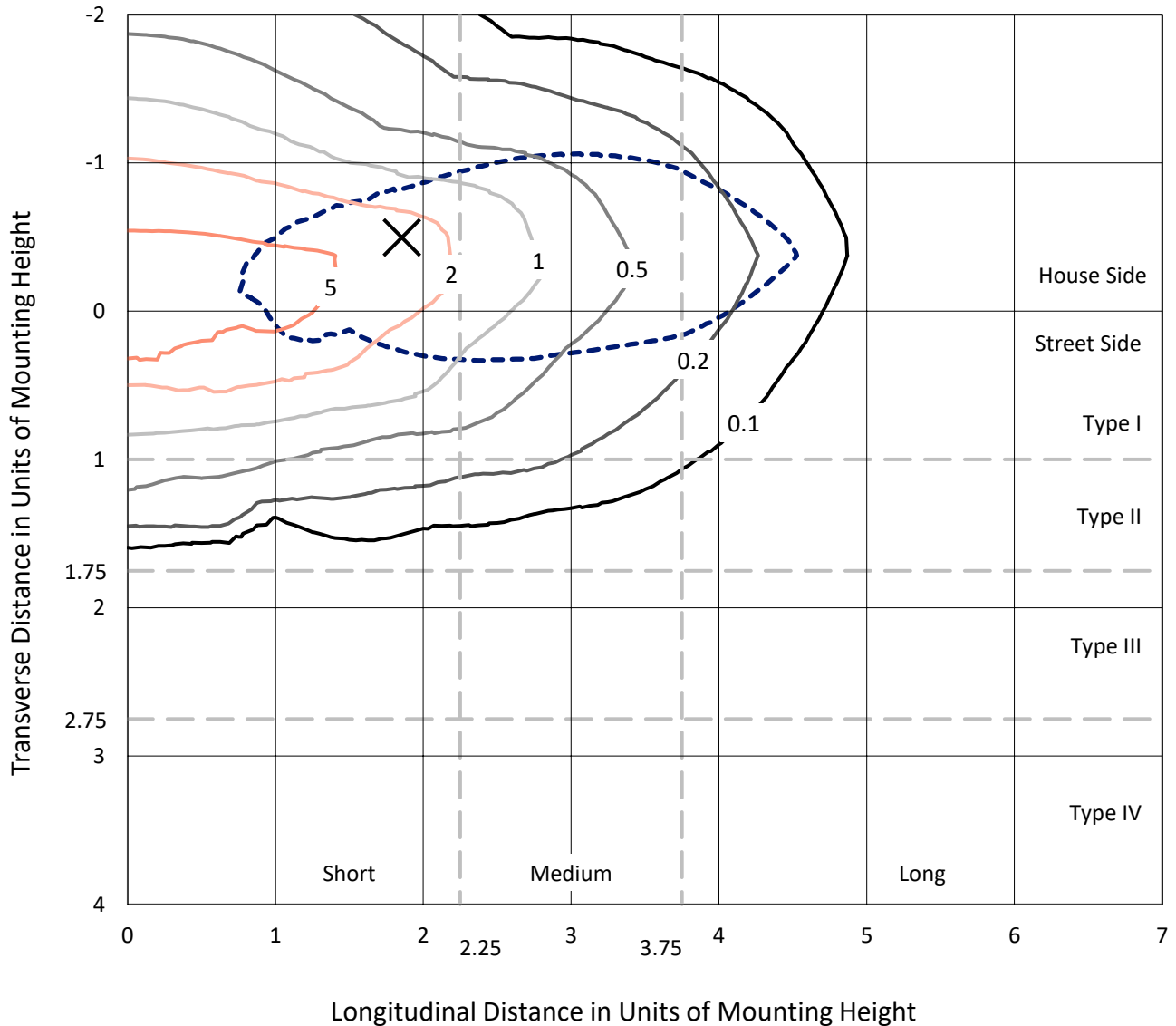
Input Watts (W): 331.5
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

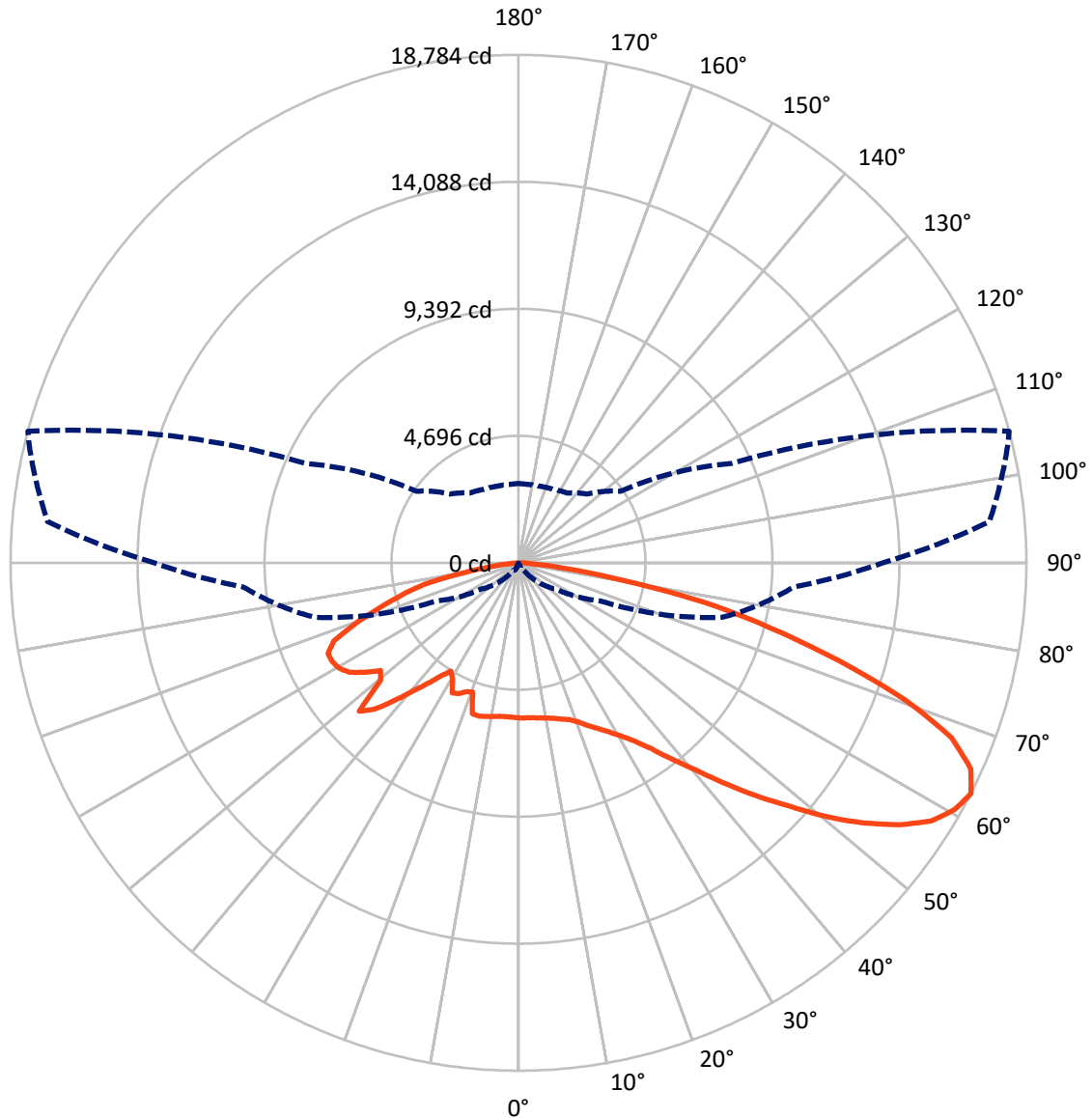
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 9.2 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 105-Deg Lateral - - - Horizontal Cone Through 62.5-Deg Vertical

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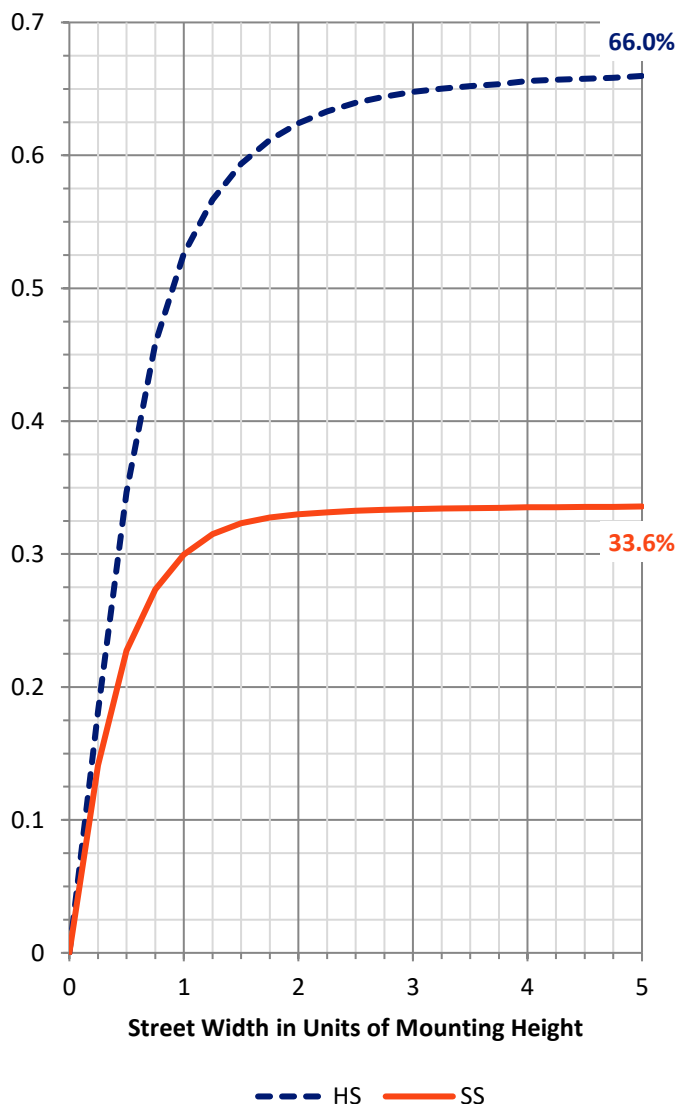
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16045.8	0.0	16045.8
	% Fixture	66.5	0.0	66.5
Street Side	Lumens	8069.2	0.0	8069.2
	% Fixture	33.5	0.0	33.5
Total	Lumens	24115.0	0.0	24115.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	547.4	2.3
10°-20°	1546.0	6.4
20°-30°	2178.9	9.0
30°-40°	2960.3	12.3
40°-50°	4027.1	16.7
50°-60°	4770.9	19.8
60°-70°	4678.4	19.4
70°-80°	2950.7	12.2
80°-90°	455.2	1.9
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°	24115.0	100.0
0°-180°	24115.0	100.0

Coefficient of Utilization

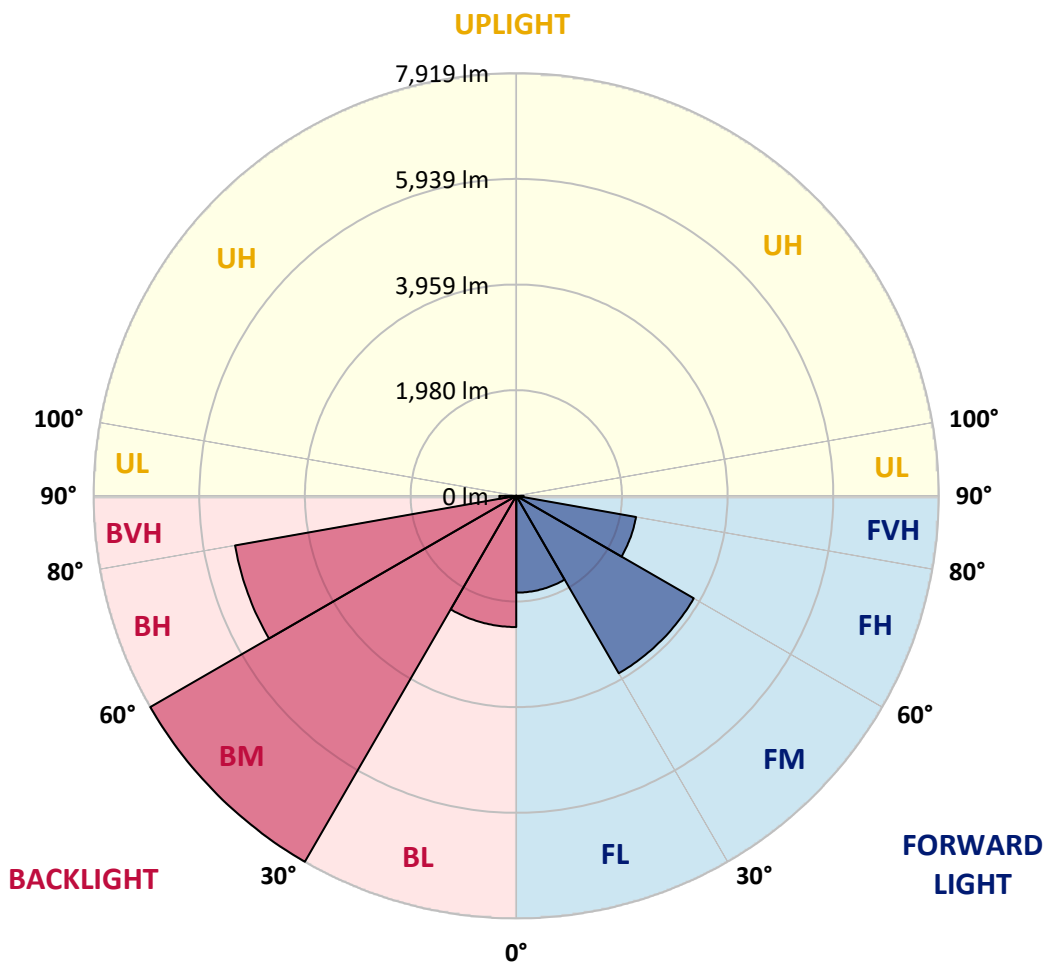


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1813.8	7.5			
FM (30°-60°)	3839.7	15.9			
FH (60°-80°)	2278.3	9.4			G2/5000
FVH (80°-90°)	137.3	0.6			G2/225
BL (0°-30°)	2458.4	10.2	B3/2500		
BM (30°-60°)	7918.7	32.8	B4/8500		
BH (60°-80°)	5350.9	22.2	B5		G5
BVH (80°-90°)	317.9	1.3			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B5-U0-G5
 Type I Short





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	75°	85°	90°
0°	5736.6	5736.6	5736.6	5736.6	5736.6	5736.6	5736.6	5736.6	5736.6	5736.6	5736.6
2.5°	5740.4	5695.6	5727.6	5776.3	5703.3	5745.5	5675.1	5732.7	5718.6	5722.5	5749.4
5°	5695.6	5648.2	5686.6	5750.7	5678.9	5726.3	5668.7	5717.4	5712.2	5730.2	5751.9
7.5°	5653.3	5608.5	5648.2	5690.5	5653.3	5699.4	5655.9	5716.1	5719.9	5759.6	5777.6
10°	5608.5	5563.6	5602.1	5650.7	5620.0	5677.6	5659.7	5732.7	5760.9	5813.4	5828.8
12.5°	5509.8	5470.1	5502.1	5558.5	5563.6	5648.2	5659.7	5772.4	5807.0	5876.2	5899.3
15°	4916.7	4960.3	5130.6	5294.6	5365.1	5521.4	5607.2	5808.3	5857.0	5955.6	5991.5
17.5°	3977.7	3895.7	3630.5	3699.7	4089.1	4614.4	4812.9	5312.5	5840.3	6055.6	6101.7
20°	2350.7	2518.6	3037.4	3196.2	3339.7	3904.7	4572.1	4869.3	5071.7	5836.5	6252.8
22.5°	1938.2	1949.8	2321.3	3054.0	3215.5	3437.1	3953.3	4932.1	5140.9	5293.3	5757.1
25°	1797.3	1808.9	1872.9	2439.1	3127.1	3383.3	3610.0	4508.0	5318.9	5507.3	5869.8
27.5°	1684.6	1700.0	1758.9	1917.7	2915.7	3367.9	3654.9	3998.2	5398.4	5760.9	6100.4
30°	1600.0	1606.4	1666.7	1820.4	2204.7	3371.7	3720.2	4086.6	4944.9	6082.5	6423.2
32.5°	1523.2	1527.0	1589.8	1739.7	1971.5	3123.2	3818.8	4271.0	4722.0	6346.4	6866.5
35°	1464.2	1461.7	1518.1	1665.4	1896.0	2391.7	3929.0	4492.7	5078.1	6096.5	7527.5
37.5°	1407.9	1404.0	1452.7	1588.5	1829.3	2239.3	3800.9	4759.1	5589.3	6286.1	7473.7
40°	1364.3	1356.6	1397.6	1519.3	1760.2	2200.9	2993.8	5041.0	6150.4	7263.6	7925.9
42.5°	1325.9	1320.8	1355.4	1452.7	1689.7	2154.7	2790.1	5193.4	6848.5	8393.5	9095.5
45°	1268.2	1275.9	1314.4	1407.9	1614.1	2089.4	2810.6	4171.1	7587.7	9373.5	10261.3
47.5°	1243.9	1242.6	1267.0	1355.4	1548.8	1998.4	2796.5	3825.2	8052.7	10399.6	11402.7
50°	1205.5	1199.1	1045.3	1293.9	1482.2	1885.7	2737.6	3925.2	6701.2	11406.5	12450.6
52.5°	1133.7	1008.2	914.7	1250.3	1414.3	1762.7	2605.7	3968.7	6470.6	11227.2	13351.2
55°	602.1	671.3	866.0	1188.8	1334.9	1652.6	2412.2	3938.0	6968.9	8977.6	12394.2
57.5°	534.2	531.6	550.9	939.0	695.6	1532.1	2179.1	3797.1	7440.4	9387.6	12626.1
60°	42.3	43.6	51.2	312.6	368.9	1078.6	1928.0	3622.8	7690.2	9871.8	13188.5
62.5°	20.5	23.1	30.7	279.3	336.9	981.3	1701.2	3325.6	7795.2	10221.6	13466.5
65°	5.1	6.4	14.1	246.0	293.4	873.7	1473.2	2977.2	7804.2	10235.6	13690.7
67.5°	3.8	6.4	14.1	222.9	267.7	778.9	1273.4	2733.8	7422.4	10183.1	13577.9
70°	3.8	6.4	14.1	199.8	242.1	675.1	1096.6	2495.5	6447.6	9987.1	13194.9
72.5°	3.8	7.7	14.1	175.5	212.7	572.6	931.3	2232.9	5411.2	9168.5	12341.7
75°	3.8	7.7	15.4	142.2	181.9	456.1	764.8	1912.6	4500.4	7950.2	10927.4
77.5°	3.8	7.7	15.4	110.2	147.3	340.8	579.0	1515.5	3590.8	5863.4	7677.4
80°	3.8	7.7	15.4	78.1	120.4	239.6	421.5	1033.8	2141.9	3082.2	3909.8
82.5°	3.8	7.7	15.4	56.4	87.1	172.9	260.1	509.9	1022.3	1479.6	1856.3
85°	2.6	6.4	14.1	37.2	46.1	105.0	155.0	226.7	306.2	404.8	547.0
87.5°	2.6	3.8	9.0	14.1	19.2	37.2	57.6	51.2	57.6	120.4	172.9
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):

	95°	104°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	5736.6	5736.6	5736.6	5736.6	5736.6	5736.6	5736.6	5736.6	5736.6	5736.6	5736.6
2.5°	5745.5	5740.4	5741.7	5769.9	5745.5	5750.7	5708.4	5792.9	5785.3	5773.7	5807.0
5°	5751.9	5749.4	5759.6	5784.0	5746.8	5753.2	5713.5	5812.2	5787.8	5784.0	5823.7
7.5°	5784.0	5780.1	5790.4	5801.9	5760.9	5760.9	5726.3	5804.5	5790.4	5764.8	5809.6
10°	5841.6	5827.5	5837.8	5844.2	5781.4	5778.8	5714.8	5807.0	5771.2	5758.3	5816.0
12.5°	5922.3	5890.3	5905.7	5895.4	5812.2	5796.8	5711.0	5771.2	5726.3	5718.6	5771.2
15°	6031.2	5988.9	6000.5	5981.3	5876.2	5831.4	5693.0	5718.6	5646.9	5640.5	5678.9
17.5°	6132.4	6106.8	6100.4	6100.4	5977.4	5866.0	5676.4	5640.5	5545.7	5539.3	5558.5
20°	6315.6	6281.0	6277.2	6246.4	6064.5	5894.1	5649.5	5539.3	5398.4	5366.3	5402.2
22.5°	6374.5	6542.4	6530.8	6395.0	6137.5	5917.2	5594.4	5412.5	5219.0	5157.5	5175.5
25°	6550.0	6802.4	6781.9	6584.6	6211.8	5930.0	5527.8	5272.8	5006.4	4898.8	4902.6
27.5°	6828.0	7085.5	7071.4	6787.0	6304.1	5933.9	5453.5	5125.5	4795.0	4654.1	4665.6
30°	7181.6	7441.7	7421.2	7012.5	6443.7	5941.5	5397.1	4948.7	4601.6	4449.1	4446.5
32.5°	7673.5	7909.2	7849.0	7313.6	6611.5	5973.6	5322.8	4780.9	4424.8	4264.6	4251.8
35°	8416.5	8503.7	8429.4	7672.2	6789.6	5994.1	5203.7	4616.9	4260.8	4103.2	4091.7
37.5°	9420.9	9313.3	9213.4	8075.8	6974.1	5988.9	5052.5	4458.1	4119.9	3970.0	3970.0
40°	9519.5	10243.3	10058.9	8501.1	7140.6	5960.8	4909.0	4303.1	4005.9	3884.2	3903.4
42.5°	9982.0	11382.2	11123.4	8912.3	7261.0	5878.8	4755.3	4162.2	3899.5	3800.9	3808.6
45°	11118.3	12418.6	12267.4	9309.4	7326.4	5734.0	4577.2	4023.8	3780.4	3702.3	3717.6
47.5°	12340.4	13650.9	13429.3	9675.8	7290.5	5520.1	4387.6	3897.0	3656.1	3606.2	3634.4
50°	13495.9	14947.4	14762.9	9933.3	7131.6	5220.3	4185.2	3762.5	3558.8	3519.1	3533.2
52.5°	14629.7	16124.7	15986.3	10072.9	6813.9	4906.4	3998.2	3634.4	3467.8	3417.9	3437.1
55°	15564.8	17240.5	17106.0	10058.9	6336.1	4578.5	3812.4	3496.0	3375.6	3330.7	3346.1
57.5°	16295.0	18109.0	18012.9	9844.9	5780.1	4277.4	3602.3	3360.2	3253.9	3214.2	3227.0
60°	16948.4	18659.9	18535.6	9372.2	5190.8	3945.7	3385.8	3198.8	3110.4	3078.4	3098.9
62.5°	17483.9	18671.4	18784.1	8688.1	4613.1	3594.6	3145.0	3000.2	2936.2	2917.0	2929.8
65°	17620.9	18328.1	18383.2	7842.6	4027.6	3246.2	2855.5	2760.7	2733.8	2722.2	2747.9
67.5°	17431.3	17604.3	17276.3	7127.8	3493.4	2851.6	2542.9	2484.0	2500.6	2503.2	2536.5
70°	16942.0	15667.3	15161.3	6529.5	2995.1	2414.8	2199.6	2180.4	2225.2	2262.3	2286.7
72.5°	15694.2	12863.1	12381.4	5684.0	2361.0	1848.6	1732.0	1793.5	1778.1	1794.8	1838.3
75°	13511.3	9928.2	9629.7	4625.9	1798.6	1343.8	1187.5	1193.9	1213.2	1297.7	1343.8
77.5°	9624.6	7140.6	7007.4	3548.5	1191.4	790.4	817.3	908.3	935.2	937.7	969.8
80°	5099.9	3980.2	3799.6	2090.7	787.8	564.9	614.9	654.6	690.5	727.6	736.6
82.5°	2298.2	1799.9	1749.9	1038.9	499.6	435.6	447.1	515.0	544.4	550.9	557.3
85°	892.9	621.3	591.8	431.7	328.0	294.6	326.7	395.8	424.0	411.2	407.4
87.5°	238.3	146.0	133.2	144.8	153.7	162.7	185.8	211.4	242.1	233.2	225.5
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)