

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: P591125

Luminaire Tested: **CTN-CA10-630-722-U-T3-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591125
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-CA10-630-722-U-T3-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 2200K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 44968 lumens
Efficiency: N/A
Efficacy: 71.2 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type III - Medium
BUG Rating: B4 - U0 - G4

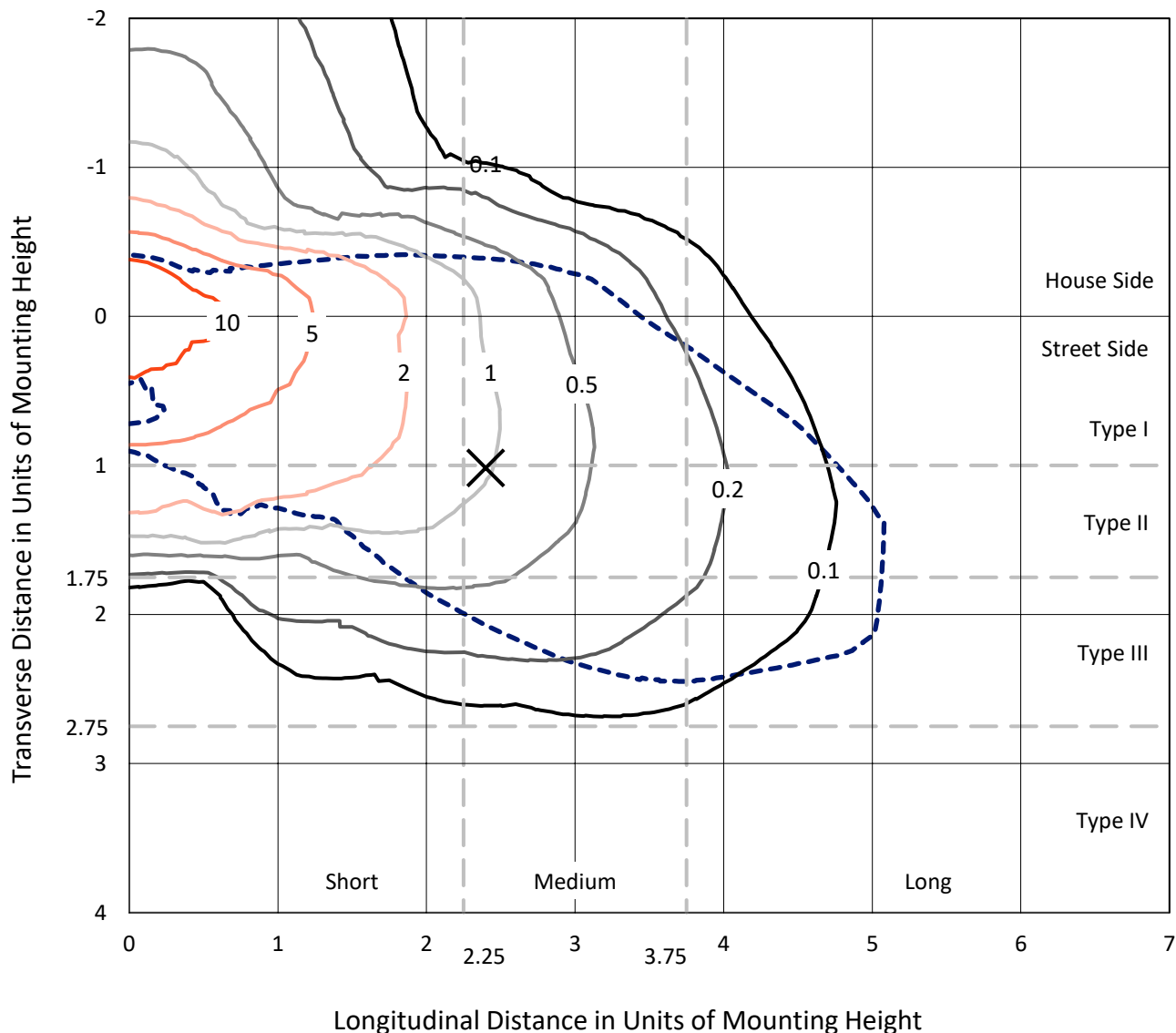
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

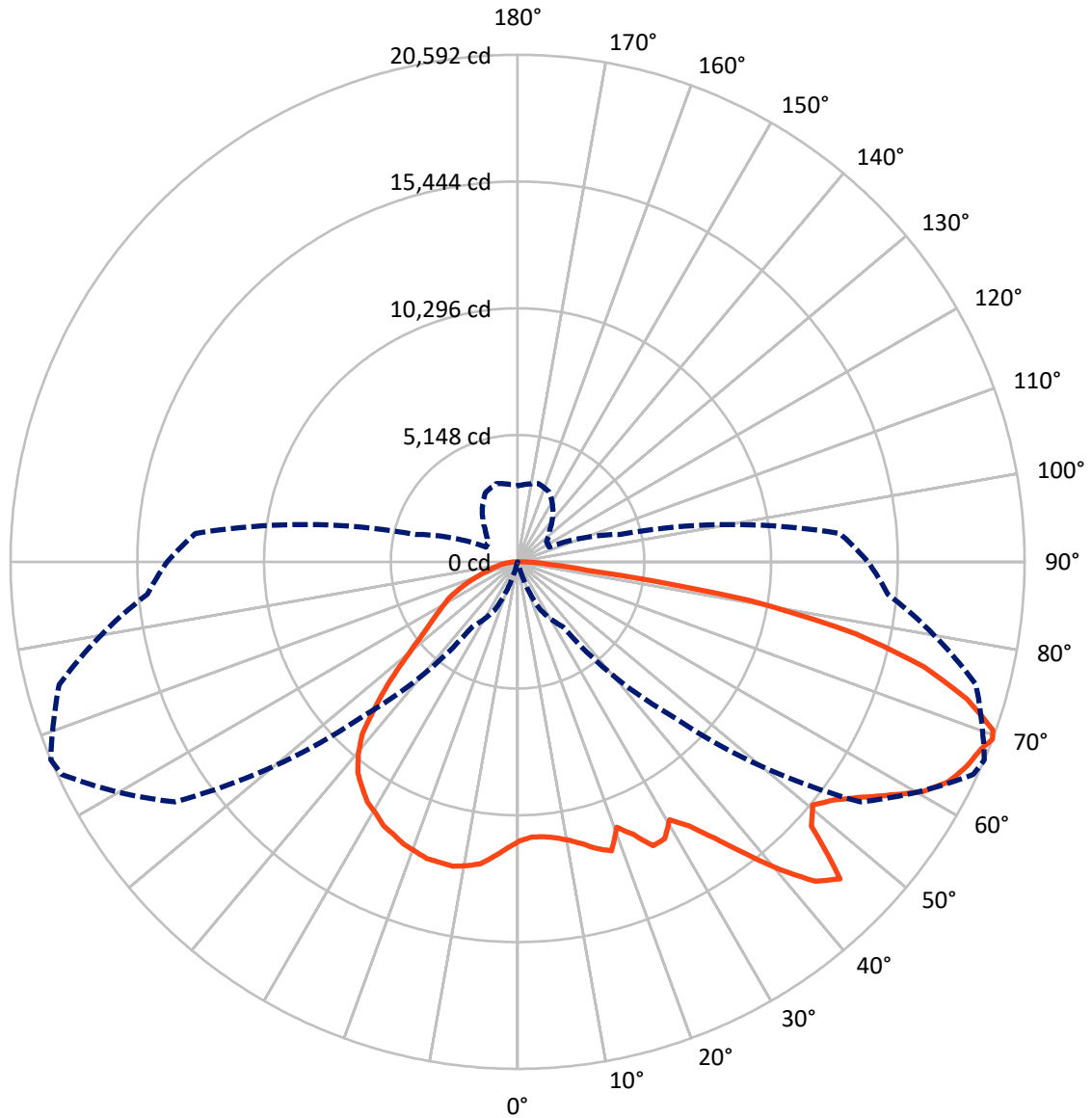
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 14.1 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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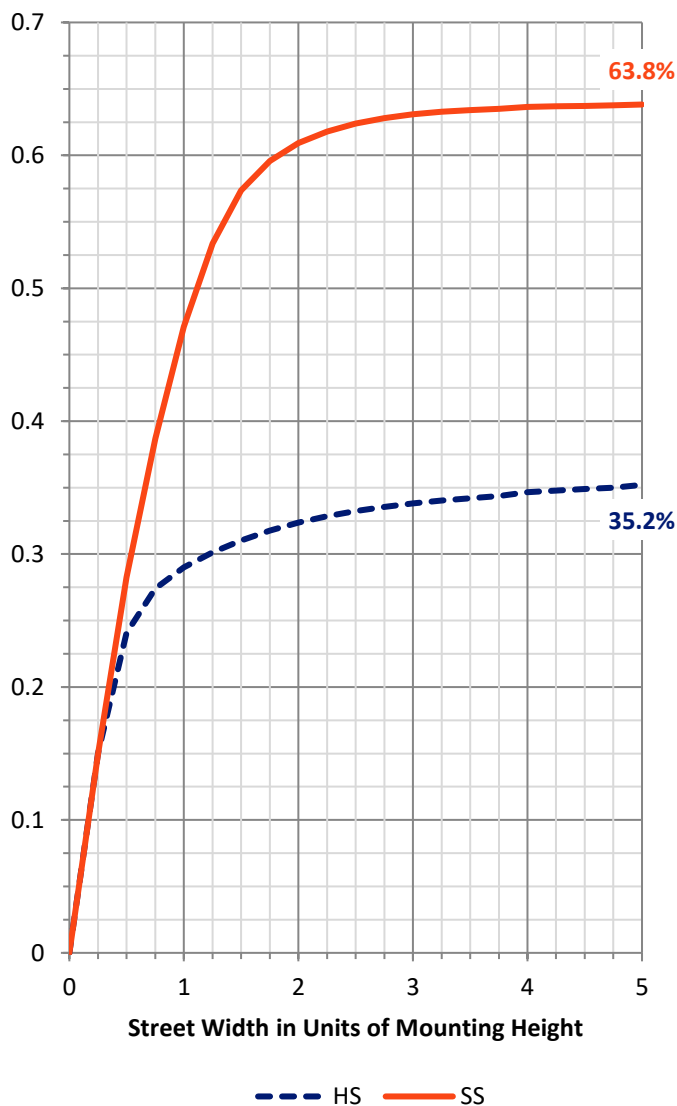
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	16268.1	0.0	16268.1
	% Fixture	36.2	0.0	36.2
Street Side	Lumens	28699.9	0.0	28699.9
	% Fixture	63.8	0.0	63.8
Total	Lumens	44968.0	0.0	44968.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1132.8	2.5
10°-20°	3497.4	7.8
20°-30°	5161.9	11.5
30°-40°	6485.6	14.4
40°-50°	7607.3	16.9
50°-60°	7960.5	17.7
60°-70°	7111.8	15.8
70°-80°	5005.4	11.1
80°-90°	1005.4	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°	44968.0	100.0
0°-180°	44968.0	100.0

Coefficient of Utilization

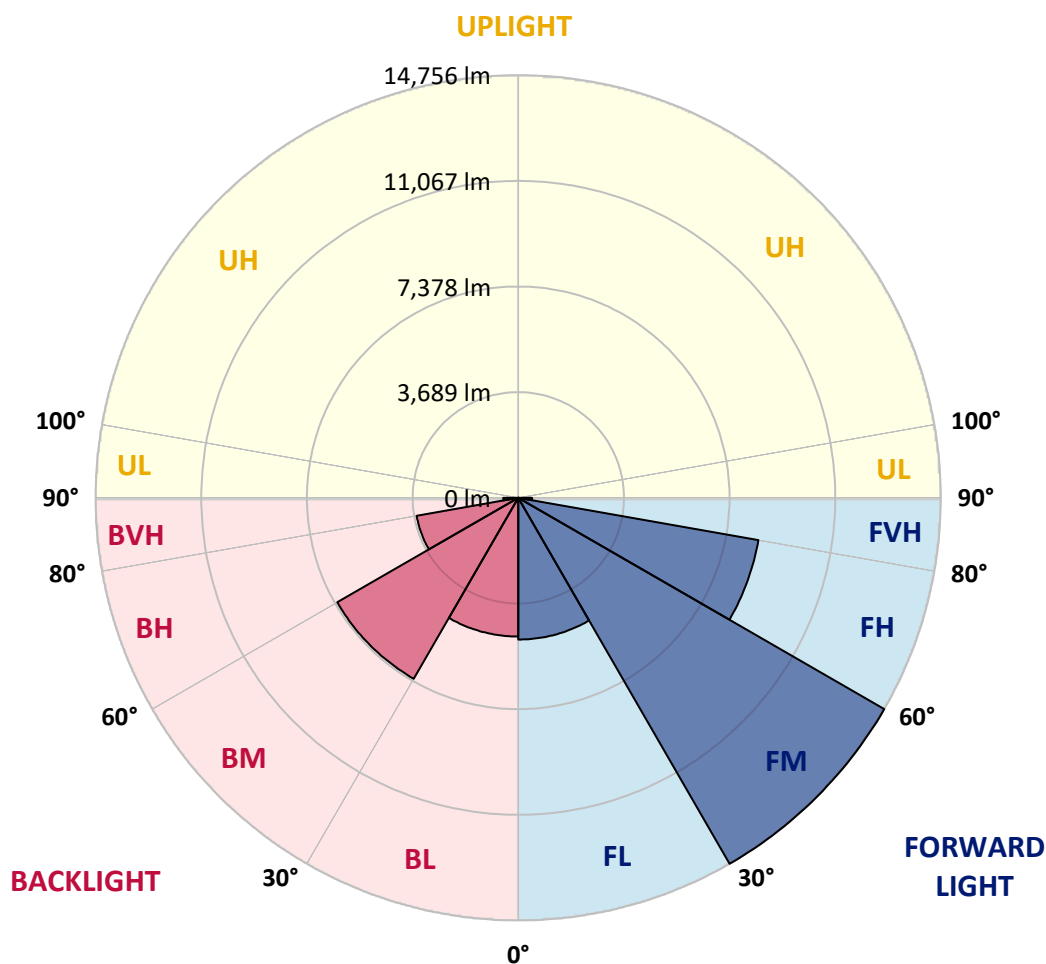


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4948.6	11.0			
FM	(30°-60°)	14756.4	32.8			
FH	(60°-80°)	8514.4	18.9			G4/12000
FVH	(80°-90°)	480.4	1.1			G3/500
BL	(0°-30°)	4843.6	10.8	B4/5000		
BM	(30°-60°)	7296.9	16.2	B4/8500		
BH	(60°-80°)	3602.7	8.0	B4/5000		G4/5000
BVH	(80°-90°)	524.9	1.2			G4/750
UL	(90°-100°)	0.0	0.0		U0/0	
UH	(100°-180°)	0.0	0.0		U0/0	

BUG Rating: B4-U0-G4
 Type III Medium





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CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	45°	55°	65°	67°	75°	85°
0°	11327.8	11327.8	11327.8	11327.8	11327.8	11327.8	11327.8	11327.8	11327.8	11327.8	11327.8
2.5°	11058.2	10993.1	11023.4	11109.3	10930.4	11058.2	11011.7	11141.9	11190.7	11183.7	11369.6
5°	11146.5	11074.5	11086.1	11151.2	10956.0	11055.9	11011.7	11155.8	11211.6	11195.3	11448.7
7.5°	11460.3	11381.3	11355.7	11376.6	11165.1	11241.8	11146.5	11262.7	11323.2	11323.2	11611.4
10°	11955.3	11860.0	11804.3	11801.9	11553.3	11518.4	11402.2	11455.6	11499.8	11537.0	11857.7
12.5°	12473.6	12394.6	12322.5	12283.0	11955.3	11874.0	11704.3	11743.8	11757.8	11808.9	12127.3
15°	12945.4	12866.4	12845.5	12782.7	12457.3	12322.5	12085.5	12066.9	12085.5	12115.7	12431.8
17.5°	12764.1	12768.8	12885.0	12896.6	12473.6	12162.2	11997.2	12310.9	12341.1	12580.5	12785.0
20°	12420.2	12250.5	11641.6	11309.2	11358.0	11762.4	11462.6	11448.7	11511.4	11936.7	12973.3
22.5°	10344.7	10251.7	10586.4	10693.3	11079.1	11232.5	11946.0	11964.6	12027.4	12027.4	12329.5
25°	8931.6	9412.7	10063.5	11225.6	11104.7	11134.9	11425.4	12659.5	12778.1	12775.7	12731.6
27.5°	9233.8	9173.3	10147.2	10876.9	11739.2	11685.7	11369.6	12208.7	12733.9	13635.7	13426.5
30°	9596.3	9552.2	9624.2	10858.3	12287.7	12359.7	12066.9	11980.9	12159.9	14054.0	14221.4
32.5°	9933.3	9879.9	9961.2	10149.5	11518.4	13054.6	12829.2	12724.6	12789.7	13170.8	15244.0
35°	10230.8	10226.2	10319.1	10542.3	11709.0	13296.4	13610.1	13603.1	13777.4	14105.1	15392.7
37.5°	10442.3	10440.0	10514.4	10774.7	11037.3	12280.7	14342.2	14758.2	15037.1	15522.9	15037.1
40°	10440.0	10477.2	10672.4	11007.1	11355.7	11729.9	14665.3	16115.5	16450.2	16796.5	15987.7
42.5°	10221.5	10242.4	10586.4	11207.0	11639.2	11962.3	13382.3	17363.6	17737.8	17712.2	16736.1
45°	10019.3	10028.6	10412.1	11174.4	11876.3	12459.7	13119.7	17358.9	18369.9	18528.0	17440.3
47.5°	9756.7	9756.7	10135.5	10986.2	12090.1	13019.8	13821.6	14995.3	16050.4	19234.5	18023.6
50°	9419.7	9461.5	8996.7	10790.9	12192.4	13552.0	14416.6	15383.4	15529.8	17200.9	18565.2
52.5°	8882.8	8859.6	7030.5	10574.8	12234.2	13937.8	15034.8	15990.0	16069.0	15901.7	18035.3
55°	5598.8	6242.6	6217.0	10321.5	12208.7	14186.5	15508.9	16657.0	16880.2	16675.6	15171.9
57.5°	3381.6	3228.2	5313.0	9596.3	9805.5	14379.4	16152.7	17670.4	17865.6	17391.5	15427.6
60°	1320.1	1245.7	1345.7	4367.0	7035.1	13377.7	17028.9	18746.4	18932.4	18072.4	15643.7
62.5°	165.0	141.8	120.9	3023.7	4471.6	9938.0	17493.7	19613.3	19648.2	18565.2	15685.6
65°	23.2	25.6	46.5	2696.0	4062.6	9768.3	17656.4	19966.6	20038.7	18920.7	15543.8
67.5°	9.3	11.6	37.2	2345.0	3565.2	9317.4	17254.3	20210.6	20294.3	19264.7	15406.7
69°	9.3	11.6	37.2	2108.0	3225.9	8820.1	16996.4	20426.8	20591.8	19271.7	15092.9
70°	9.3	11.6	34.9	1938.3	2960.9	8399.4	16747.7	20343.1	20475.6	19085.8	14744.3
72.5°	9.3	11.6	34.9	1492.1	2252.1	6744.6	15174.2	19157.8	19090.4	17914.4	13387.0
75°	11.6	11.6	34.9	1048.2	1561.8	4797.0	12806.0	17012.6	17042.9	15948.2	11260.4
77.5°	11.6	11.6	34.9	667.0	985.4	2775.0	9273.3	13951.8	14037.7	13287.1	8431.9
80°	11.6	11.6	34.9	304.5	611.2	1450.3	4559.9	9092.0	9554.5	8920.0	4627.3
82.5°	11.6	11.6	32.5	190.6	334.7	653.1	1798.9	2851.7	2823.8	2779.7	1471.2
85°	9.3	9.3	25.6	134.8	223.1	378.8	999.4	1278.3	1262.0	1117.9	760.0
87.5°	4.6	4.6	13.9	55.8	93.0	172.0	499.7	581.0	553.1	474.1	325.4
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°	11327.8	11327.8	11327.8	11327.8	11327.8	11327.8	11327.8	11327.8	11327.8	11327.8	11327.8
2.5°	11455.6	11471.9	11548.6	11648.5	11678.8	11808.9	11829.8	12043.6	12076.2	12129.6	12152.9
5°	11571.8	11634.6	11801.9	12036.7	12236.5	12441.1	12448.0	12708.3	12775.7	12761.8	12829.2
7.5°	11736.9	11841.4	12097.1	12422.5	12494.5	12759.5	12740.9	12998.9	13003.5	12966.3	13068.6
10°	11990.2	12120.3	12352.8	12552.6	12689.8	12861.7	12838.5	13082.5	13047.7	13008.2	13122.0
12.5°	12250.5	12317.9	12459.7	12682.8	12713.0	12773.4	12743.2	12968.6	12931.5	12882.7	12994.2
15°	12478.3	12510.8	12510.8	12631.7	12555.0	12603.8	12501.5	12682.8	12596.8	12573.5	12680.5
17.5°	12773.4	12720.0	12610.7	12601.4	12401.6	12327.2	12173.8	12222.6	12059.9	12076.2	12132.0
20°	13105.8	12987.2	12699.1	12410.9	12041.3	11864.7	11560.2	11537.0	11385.9	11358.0	11411.5
22.5°	13229.0	13333.5	12806.0	12248.2	11611.4	11216.3	10856.0	10684.0	10463.2	10321.5	10340.1
25°	13603.1	13791.4	12968.6	11957.7	11104.7	10453.9	9912.4	9519.6	9187.3	9017.6	9052.5
27.5°	14109.8	14416.6	13061.6	11755.5	10440.0	9589.4	8683.0	8167.0	7823.0	7646.4	7641.7
30°	14834.9	15220.7	13240.6	11332.5	9700.9	8452.9	7335.0	6726.0	6444.8	6328.6	6337.9
32.5°	15741.3	16206.2	13612.4	10979.2	8896.8	7237.3	5963.7	5431.5	5303.7	5282.7	5271.1
35°	16942.9	17403.1	13907.6	10435.3	7853.2	5859.1	4787.7	4411.2	4432.1	4427.5	4441.4
37.5°	16747.7	18493.1	14244.6	9903.1	6605.2	4592.5	3869.7	3658.2	3665.2	3746.5	3762.8
40°	16013.3	17540.2	14746.6	9022.3	5145.6	3528.0	3051.6	3002.8	3202.7	3381.6	3414.1
42.5°	16589.6	16966.2	14814.0	8071.7	3765.1	2705.3	2551.9	2754.1	3077.1	3284.0	3321.2
45°	17166.0	17470.5	14423.6	6649.3	2700.6	2314.8	2428.7	2719.2	3077.1	3297.9	3323.5
47.5°	17751.7	17749.4	13968.0	5331.6	2207.9	2212.6	2398.5	2721.6	3095.7	3318.9	3332.8
50°	18123.6	17974.8	12778.1	4176.5	2054.5	2152.1	2382.2	2735.5	3091.1	3253.8	3260.8
52.5°	18309.5	18088.7	11727.6	3337.5	1982.5	2103.3	2384.6	2768.0	3065.5	3156.2	3151.5
55°	17995.7	18026.0	10858.3	2775.0	1915.1	2063.8	2396.2	2791.3	3077.1	3170.1	3170.1
57.5°	17605.3	17612.3	10165.7	2349.7	1847.7	2031.3	2410.1	2826.1	3291.0	3465.3	3439.7
60°	17331.0	17017.3	9185.0	2082.4	1771.0	2001.1	2428.7	2977.2	3793.0	3969.6	3909.2
62.5°	16880.2	16454.8	8176.3	1896.5	1685.0	1977.8	2440.3	3188.7	3860.4	3869.7	3720.9
65°	16090.0	15481.0	6600.5	1712.9	1596.7	1945.3	2433.4	3267.7	3555.9	3416.5	3374.6
67.5°	14946.5	14151.6	5173.5	1529.3	1499.1	1896.5	2479.8	3123.6	3358.4	3244.5	3188.7
69°	14233.0	13143.0	4295.0	1420.0	1436.3	1859.3	2503.1	3095.7	3288.6	3149.2	3084.1
70°	13691.5	12269.1	3637.3	1348.0	1382.9	1826.8	2456.6	3079.5	3256.1	3084.1	3007.4
72.5°	11625.3	9863.6	2328.8	1180.7	1243.4	1745.4	2331.1	2977.2	3184.1	3067.9	2972.6
75°	8987.4	7244.3	1485.1	1027.3	1101.6	1624.6	2201.0	2905.2	3216.6	3007.4	2798.3
77.5°	6049.7	4046.3	1134.2	862.3	934.3	1466.5	1994.1	2703.0	3105.0	2921.4	2663.5
80°	2756.4	1543.2	876.2	699.6	755.3	1180.7	1719.9	2391.5	2935.4	2933.1	2747.1
82.5°	1104.0	1031.9	650.8	534.6	595.0	880.8	1361.9	2047.6	2589.1	2700.6	2884.2
85°	643.8	650.8	432.3	371.9	443.9	648.4	971.5	1582.7	2105.7	2328.8	2484.5
87.5°	262.6	292.8	202.2	195.2	244.0	346.3	446.2	767.0	1134.2	1392.2	1487.4
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)