

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: P591311

Luminaire Tested: **CTN-CA10-630-730-U-T1-SSS-HM-EX120**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591311
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-CA10-630-730-U-T1-SSS-HM-EX120
Description: CELESTEON HIGH MAST LUMINAIRE, 120D FIELD INSTALLED SHIELD ON STREET SIDE
Light Source: (10) 3000K CCT, 70 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 52710 lumens
Efficiency: N/A
Efficacy: 83.5 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

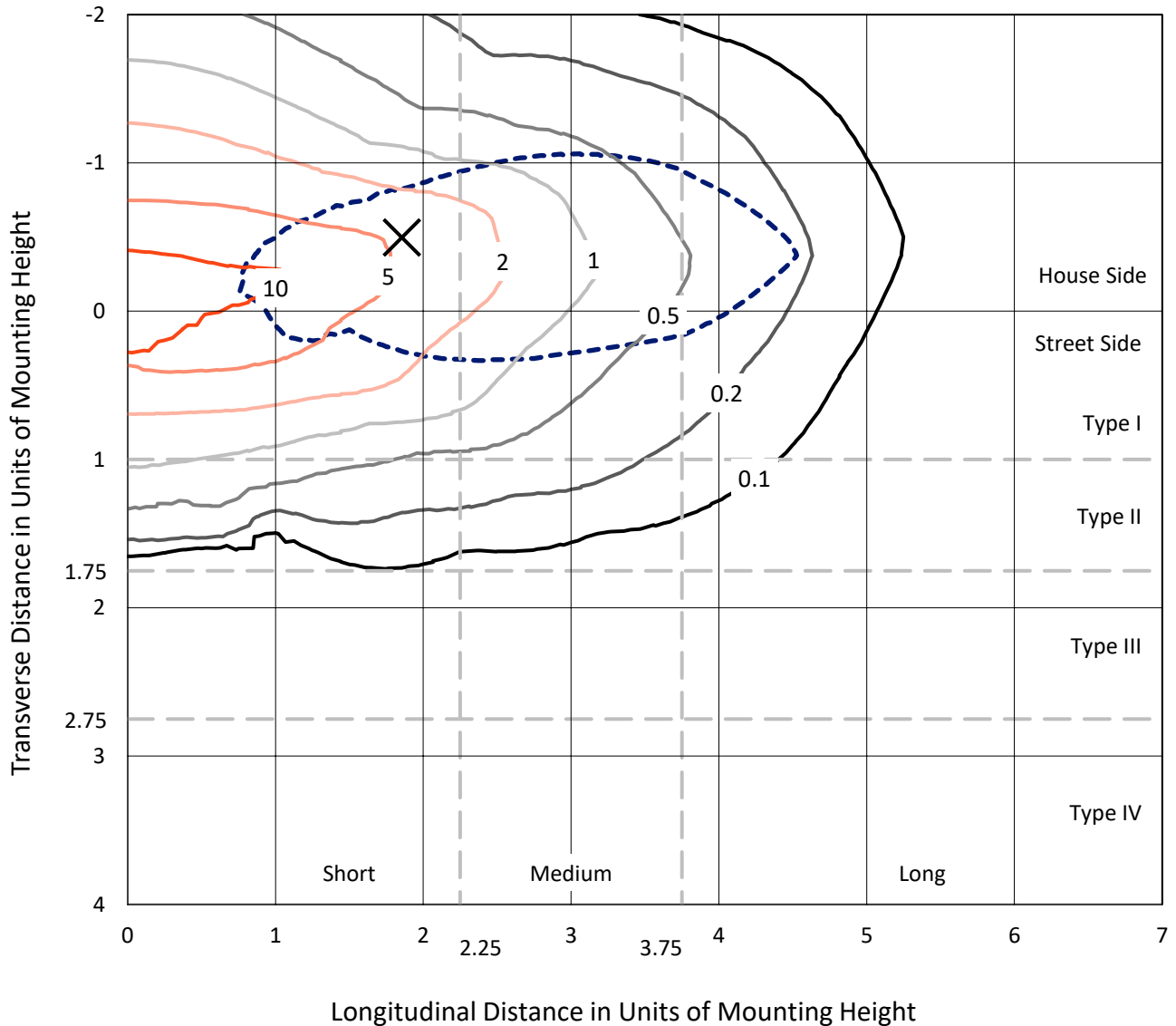
Input Watts (W): 631.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

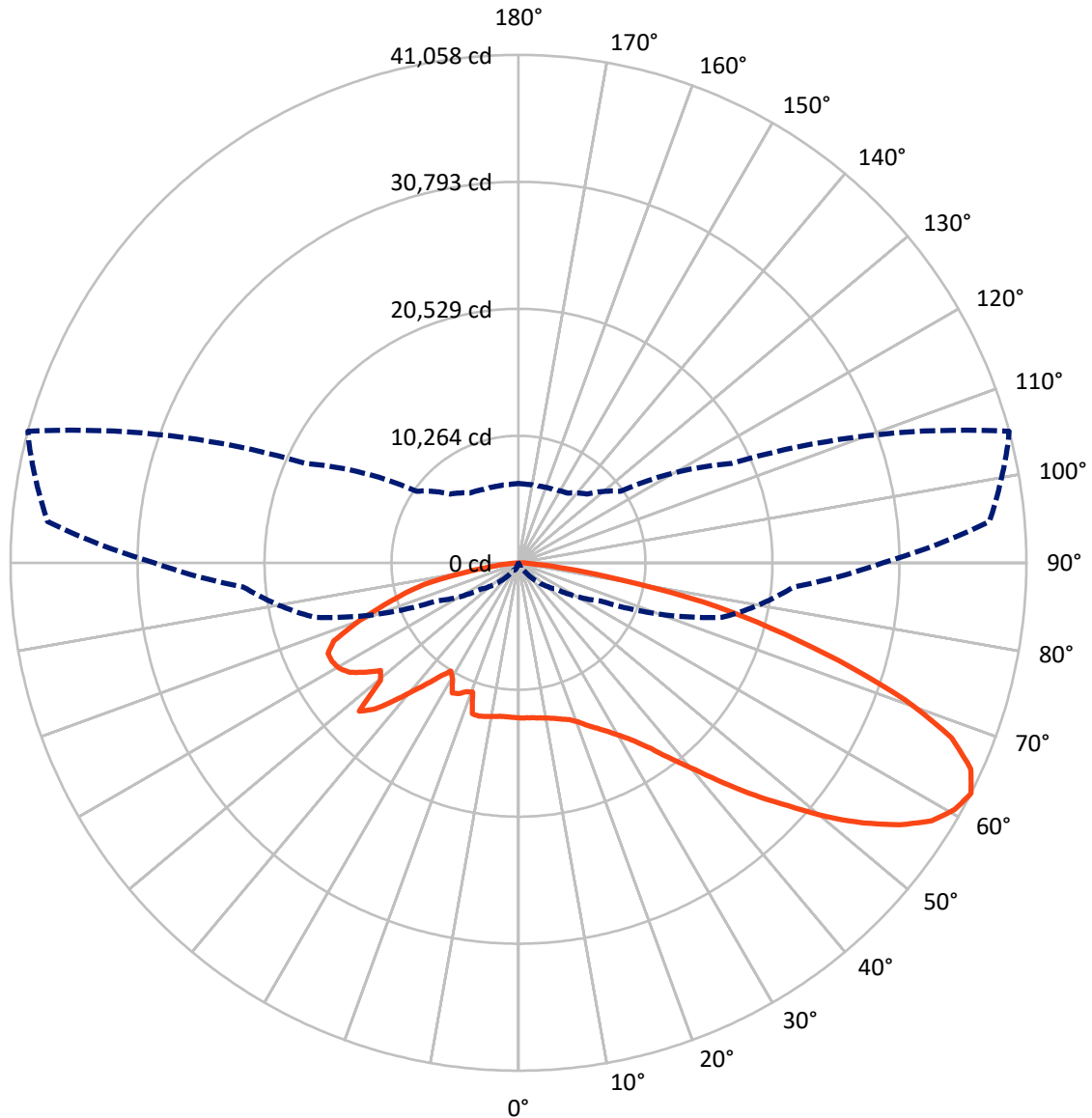
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 13.9 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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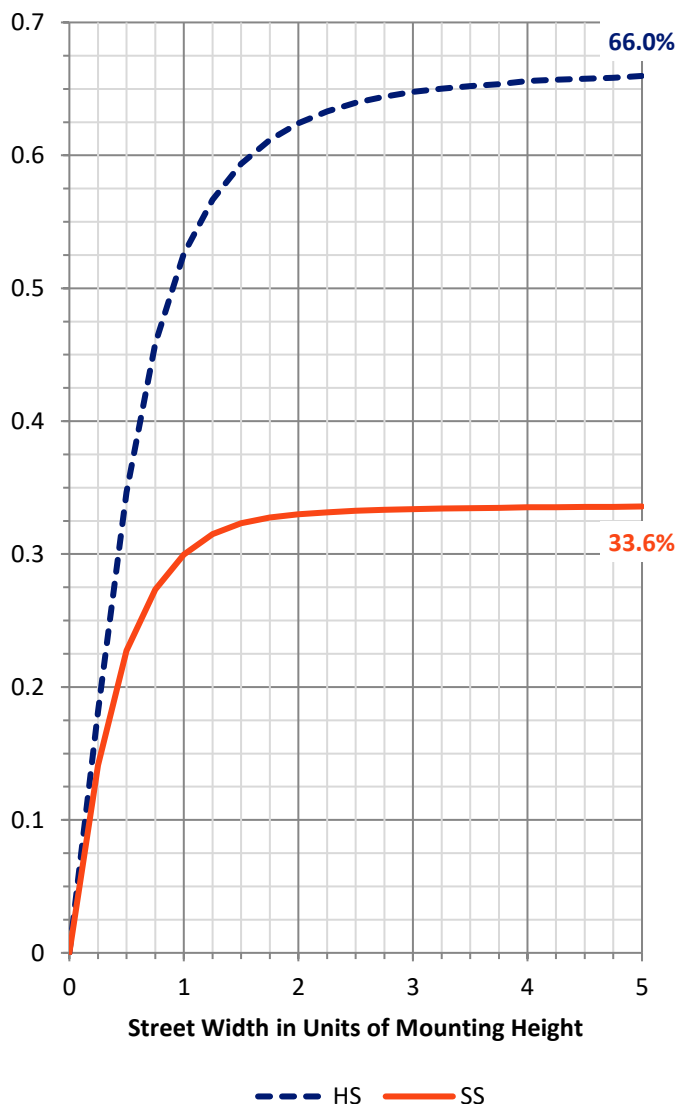
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	35072.6	0.0	35072.6
	% Fixture	66.5	0.0	66.5
Street Side	Lumens	17637.4	0.0	17637.4
	% Fixture	33.5	0.0	33.5
Total	Lumens	52710.0	0.0	52710.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1196.5	2.3
10°-20°	3379.2	6.4
20°-30°	4762.5	9.0
30°-40°	6470.6	12.3
40°-50°	8802.4	16.7
50°-60°	10428.2	19.8
60°-70°	10226.0	19.4
70°-80°	6449.7	12.2
80°-90°	994.9	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°	52710.0	100.0
0°-180°	52710.0	100.0

Coefficient of Utilization

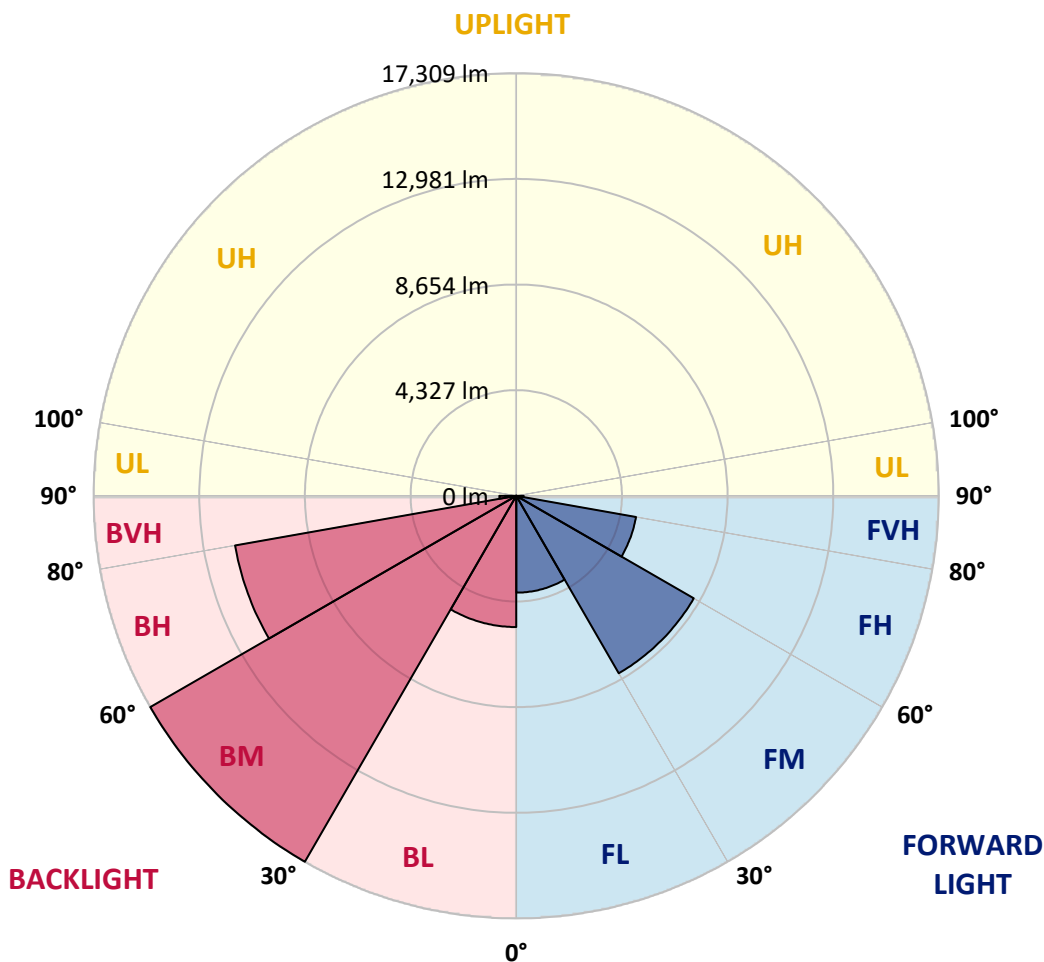


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	3964.6	7.5			
FM	(30°-60°)	8392.7	15.9			
FH	(60°-80°)	4979.9	9.4			G2/5000
FVH	(80°-90°)	300.1	0.6			G3/500
BL	(0°-30°)	5373.5	10.2	B5		
BM	(30°-60°)	17308.5	32.8	B5		
BH	(60°-80°)	11695.8	22.2	B5		G5
BVH	(80°-90°)	694.8	1.3			G4/750
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°	12538.9	12538.9	12538.9	12538.9	12538.9	12538.9	12538.9	12538.9	12538.9	12538.9	12538.9
2.5°	12547.3	12449.3	12519.3	12625.7	12466.1	12558.5	12404.5	12530.5	12499.7	12508.1	12566.9
5°	12449.3	12345.7	12429.7	12569.7	12412.9	12516.5	12390.5	12496.9	12485.7	12524.9	12572.5
7.5°	12356.9	12258.9	12345.7	12438.1	12356.9	12457.7	12362.5	12494.1	12502.5	12589.3	12628.5
10°	12258.9	12160.9	12244.9	12351.3	12284.1	12410.1	12370.9	12530.5	12592.1	12706.9	12740.5
12.5°	12043.2	11956.4	12026.4	12149.6	12160.9	12345.7	12370.9	12617.3	12692.9	12844.1	12894.5
15°	10746.8	10842.0	11214.4	11572.8	11726.8	12068.4	12256.1	12695.7	12802.1	13017.7	13096.1
17.5°	8694.3	8515.1	7935.5	8086.7	8937.9	10086.0	10520.0	11612.0	12765.7	13236.1	13336.9
20°	5138.2	5505.0	6639.0	6986.3	7299.9	8534.7	9993.6	10643.2	11085.6	12757.3	13667.3
22.5°	4236.6	4261.8	5073.8	6675.4	7028.3	7512.7	8641.1	10780.4	11236.8	11570.0	12583.7
25°	3928.5	3953.7	4093.8	5331.4	6835.1	7395.1	7890.7	9853.6	11626.0	12037.6	12830.1
27.5°	3682.1	3715.7	3844.5	4191.8	6373.0	7361.5	7988.7	8739.1	11799.6	12592.1	13334.1
30°	3497.3	3511.3	3642.9	3978.9	4819.0	7369.9	8131.5	8932.3	10808.4	13294.9	14039.7
32.5°	3329.3	3337.7	3474.9	3802.5	4309.4	6826.7	8347.1	9335.5	10321.2	13871.7	15008.6
35°	3200.5	3194.9	3318.1	3640.1	4144.2	5227.8	8587.9	9820.0	11099.6	13325.7	16453.4
37.5°	3077.3	3068.9	3175.3	3472.1	3998.5	4894.6	8307.9	10402.4	12216.9	13740.1	16335.8
40°	2982.1	2965.3	3054.9	3320.9	3847.3	4810.6	6543.8	11018.4	13443.3	15876.6	17324.2
42.5°	2898.1	2886.9	2962.5	3175.3	3693.3	4709.8	6098.6	11351.6	14969.4	18346.3	19880.7
45°	2772.1	2788.9	2872.9	3077.3	3528.1	4567.0	6143.4	9117.1	16585.0	20488.4	22428.8
47.5°	2718.9	2716.1	2769.3	2962.5	3385.3	4368.2	6112.6	8361.1	17601.5	22731.2	24923.7
50°	2634.9	2620.9	2284.9	2828.1	3239.7	4121.8	5983.8	8579.5	14647.3	24932.1	27214.2
52.5°	2478.1	2203.7	1999.3	2732.9	3091.3	3852.9	5695.4	8674.7	14143.3	24540.1	29182.7
55°	1316.0	1467.3	1892.9	2598.5	2917.7	3612.1	5272.6	8607.5	15232.6	19623.1	27091.0
57.5°	1167.6	1162.0	1204.0	2052.5	1520.5	3348.9	4763.0	8299.5	16263.0	20519.2	27597.8
60°	92.4	95.2	112.0	683.2	806.4	2357.7	4214.2	7918.7	16809.0	21577.6	28827.1
62.5°	44.8	50.4	67.2	610.4	736.4	2144.9	3718.5	7269.1	17038.6	22342.0	29434.7
65°	11.2	14.0	30.8	537.6	641.2	1909.7	3220.1	6507.4	17058.2	22372.8	29924.7
67.5°	8.4	14.0	30.8	487.2	585.2	1702.5	2783.3	5975.4	16223.8	22258.0	29678.3
70°	8.4	14.0	30.8	436.8	529.2	1475.7	2396.9	5454.6	14092.9	21829.6	28841.1
72.5°	8.4	16.8	30.8	383.6	464.8	1251.6	2035.7	4880.6	11827.6	20040.3	26976.2
75°	8.4	16.8	33.6	310.8	397.6	996.8	1671.7	4180.6	9836.8	17377.4	23884.9
77.5°	8.4	16.8	33.6	240.8	322.0	744.8	1265.6	3312.5	7848.7	12816.1	16781.0
80°	8.4	16.8	33.6	170.8	263.2	523.6	921.2	2259.7	4681.8	6737.0	8545.9
82.5°	8.4	16.8	33.6	123.2	190.4	378.0	568.4	1114.4	2234.5	3234.1	4057.4
85°	5.6	14.0	30.8	81.2	100.8	229.6	338.8	495.6	669.2	884.8	1195.6
87.5°	5.6	8.4	19.6	30.8	42.0	81.2	126.0	112.0	126.0	263.2	378.0
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°	12538.9	12538.9	12538.9	12538.9	12538.9	12538.9	12538.9	12538.9	12538.9	12538.9	12538.9
2.5°	12558.5	12547.3	12550.1	12611.7	12558.5	12569.7	12477.3	12662.1	12645.3	12620.1	12692.9
5°	12572.5	12566.9	12589.3	12642.5	12561.3	12575.3	12488.5	12704.1	12650.9	12642.5	12729.3
7.5°	12642.5	12634.1	12656.5	12681.7	12592.1	12592.1	12516.5	12687.3	12656.5	12600.5	12698.5
10°	12768.5	12737.7	12760.1	12774.1	12636.9	12631.3	12491.3	12692.9	12614.5	12586.5	12712.5
12.5°	12944.9	12874.9	12908.5	12886.1	12704.1	12670.5	12482.9	12614.5	12516.5	12499.7	12614.5
15°	13182.9	13090.5	13115.7	13073.7	12844.1	12746.1	12443.7	12499.7	12342.9	12328.9	12412.9
17.5°	13404.1	13348.1	13334.1	13334.1	13065.3	12821.7	12407.3	12328.9	12121.6	12107.6	12149.6
20°	13804.5	13728.9	13720.5	13653.3	13255.7	12883.3	12348.5	12107.6	11799.6	11729.6	11808.0
22.5°	13933.3	14300.1	14274.9	13978.1	13415.3	12933.7	12228.1	11830.4	11407.6	11273.2	11312.4
25°	14316.9	14868.6	14823.7	14392.5	13577.7	12961.7	12082.4	11525.2	10942.8	10707.6	10716.0
27.5°	14924.6	15487.4	15456.6	14834.9	13779.3	12970.1	11920.0	11203.2	10480.8	10172.8	10198.0
30°	15697.4	16265.8	16221.0	15327.8	14084.5	12986.9	11796.8	10816.8	10058.0	9724.8	9719.2
32.5°	16772.6	17287.8	17156.2	15985.8	14451.3	13056.9	11634.4	10450.0	9671.6	9321.5	9293.5
35°	18396.7	18587.1	18424.7	16769.8	14840.5	13101.7	11374.0	10091.6	9313.1	8968.7	8943.5
37.5°	20592.0	20356.8	20138.3	17651.9	15243.8	13090.5	11043.6	9744.4	9005.1	8677.5	8677.5
40°	20807.6	22389.6	21986.4	18581.5	15607.8	13028.9	10730.0	9405.5	8755.9	8489.9	8531.9
42.5°	21818.4	24878.9	24313.3	19480.3	15871.0	12849.7	10394.0	9097.5	8523.5	8307.9	8324.7
45°	24302.1	27144.2	26813.8	20348.4	16013.8	12533.3	10004.8	8795.1	8263.1	8092.3	8125.9
47.5°	26973.4	29837.9	29353.5	21149.2	15935.4	12065.6	9590.4	8517.9	7991.5	7882.3	7943.9
50°	29499.1	32671.6	32268.4	21712.0	15588.2	11410.4	9147.9	8223.9	7778.7	7691.9	7722.7
52.5°	31977.2	35244.9	34942.5	22017.2	14893.8	10724.4	8739.1	7943.9	7579.9	7470.7	7512.7
55°	34021.3	37683.8	37389.8	21986.4	13849.3	10007.6	8333.1	7641.5	7378.3	7280.3	7313.9
57.5°	35617.3	39582.3	39372.3	21518.8	12634.1	9349.5	7873.9	7344.7	7112.3	7025.5	7053.5
60°	37045.4	40786.3	40514.7	20485.6	11346.0	8624.3	7400.7	6991.9	6798.7	6728.6	6773.5
62.5°	38215.8	40811.5	41057.9	18990.3	10083.2	7857.1	6874.3	6557.8	6417.8	6375.8	6403.8
65°	38515.4	40061.1	40181.5	17142.2	8803.5	7095.5	6241.4	6034.2	5975.4	5950.2	6006.2
67.5°	38101.0	38479.0	37762.2	15579.8	7635.9	6233.0	5558.2	5429.4	5465.8	5471.4	5544.2
70°	37031.4	34245.3	33139.2	14272.1	6546.6	5278.2	4807.8	4765.8	4863.8	4945.0	4998.2
72.5°	34304.1	28115.8	27063.0	12424.1	5160.6	4040.5	3785.7	3920.1	3886.5	3922.9	4018.1
75°	29532.7	21700.8	21048.4	10111.2	3931.3	2937.3	2595.7	2609.7	2651.7	2836.5	2937.3
77.5°	21037.2	15607.8	15316.6	7756.3	2604.1	1727.7	1786.5	1985.3	2044.1	2049.7	2119.7
80°	11147.2	8699.9	8305.1	4569.8	1722.1	1234.8	1344.0	1430.9	1509.3	1590.5	1610.1
82.5°	5023.4	3934.1	3824.9	2270.9	1092.0	952.0	977.2	1125.6	1190.0	1204.0	1218.0
85°	1951.7	1358.1	1293.6	943.6	716.8	644.0	714.0	865.2	926.8	898.8	890.4
87.5°	520.8	319.2	291.2	316.4	336.0	355.6	406.0	462.0	529.2	509.6	492.8
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)