

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: P591132

Luminaire Tested: **CTN-CA10-760-722-U-T1-SSS-HM-EX180**

Issue Date: 1/19/2022

Test Information

Test Method: LM-79-08
Report Number: P591132
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-2201-495-3)
Test Lab: COOPER LIGHTING SOLUTIONS
Issue Date: 1/19/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: McGRAW-EDISON
Catalog Number: CTN-CA10-760-722-U-T1-SSS-HM-EX180
Description: CELESTEON HIGH MAST LUMINAIRE, 180D 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: 55177 lumens
Efficiency: N/A
Efficacy: 72.4 lumens/watt
Luminous Opening: Vertical Cylinder (Dia: 2.08' x H: 1')
IES Classification: Type I - Short
BUG Rating: B5 - U0 - G5

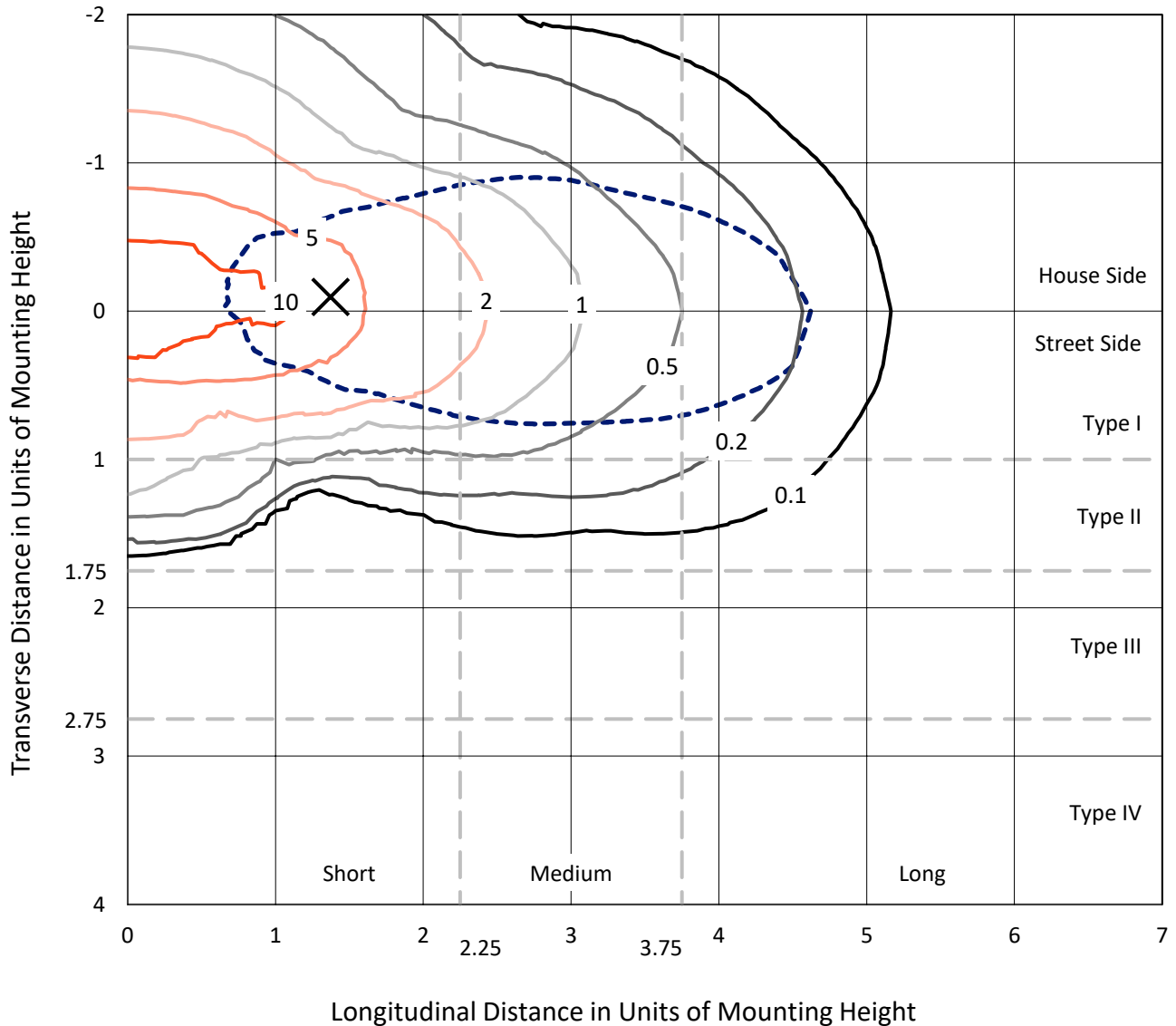
Input Watts (W): 761.9
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 24 FT



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Iso-Footcandle Lines of Horizontal Illumination

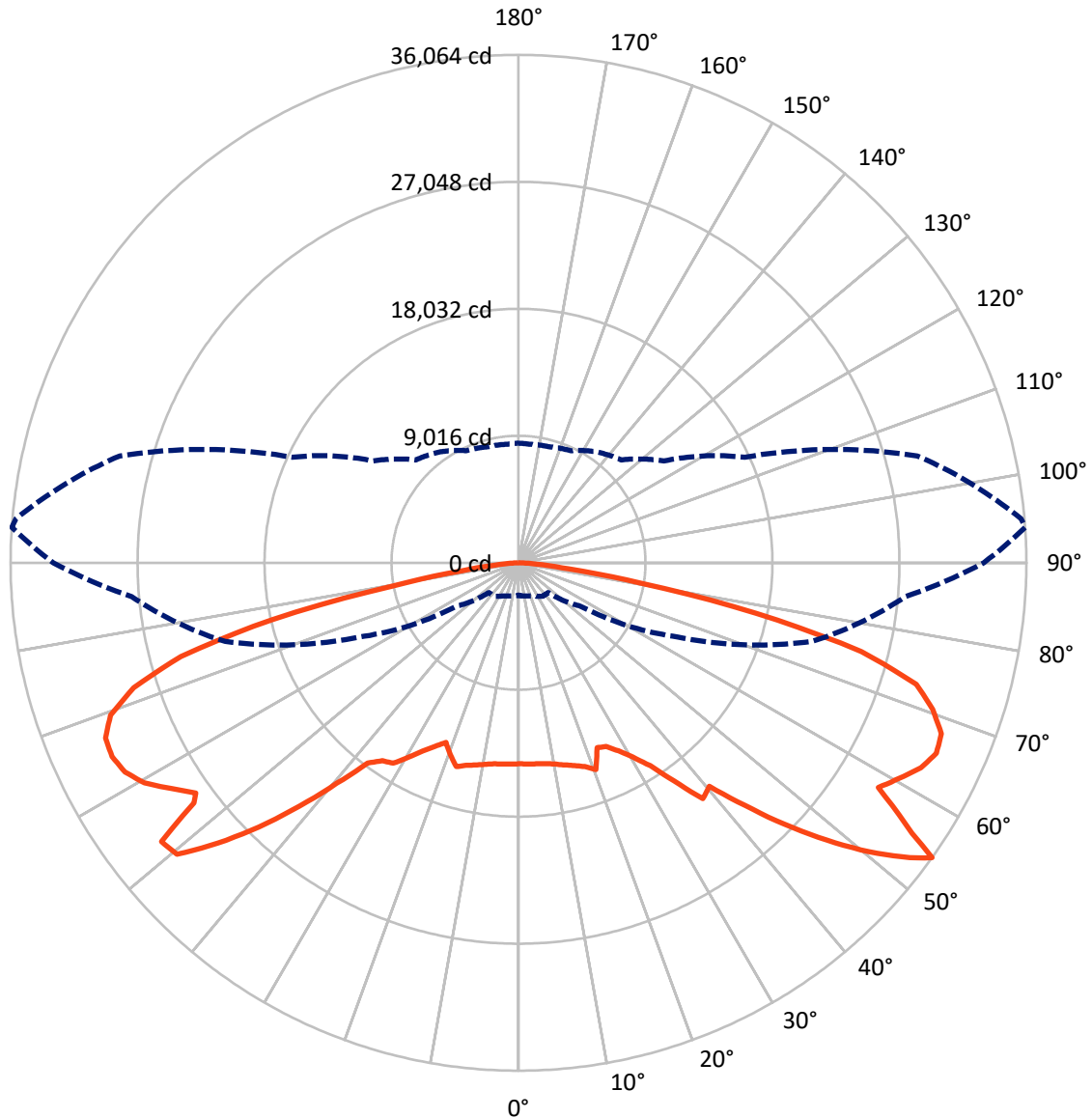
× Max cd
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 15.9 fc
 Type I - Short - N/A

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Luminous Intensity Polar Plot



— Vertical Plane Through 94-Deg Lateral - - - Horizontal Cone Through 54-Deg Vertical

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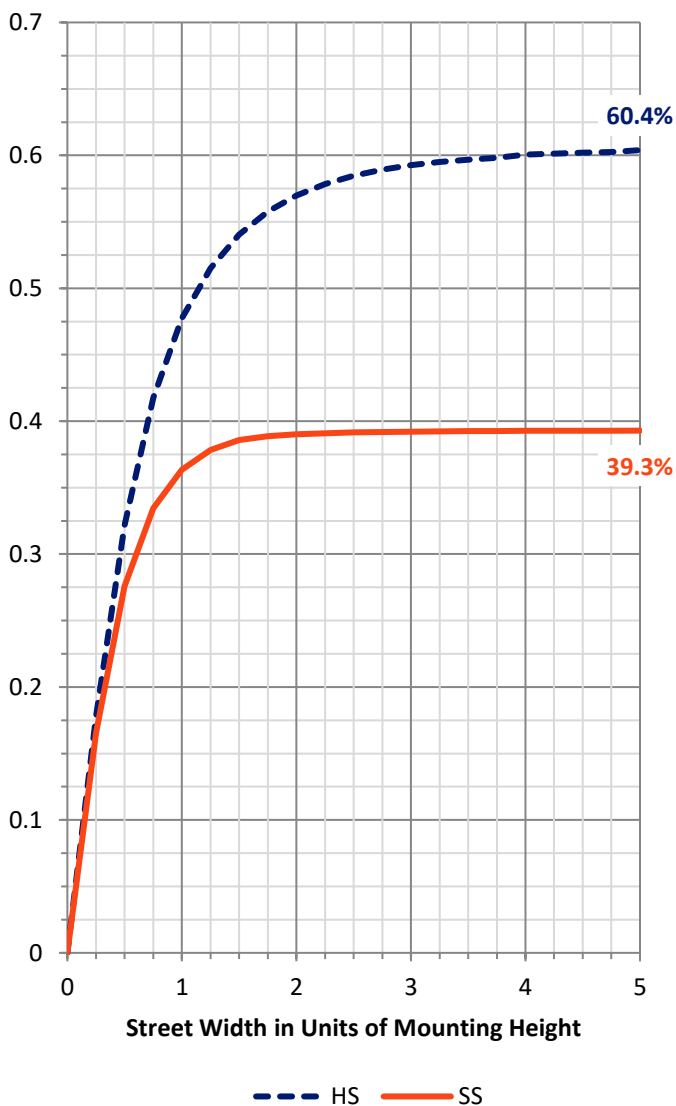
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	33607.4	0.0	33607.4
	% Fixture	60.9	0.0	60.9
Street Side	Lumens	21569.6	0.0	21569.6
	% Fixture	39.1	0.0	39.1
Total	Lumens	55177.0	0.0	55177.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1361.6	2.5
10°-20°	3895.9	7.1
20°-30°	5564.5	10.1
30°-40°	7362.5	13.3
40°-50°	9692.2	17.6
50°-60°	10693.2	19.4
60°-70°	9635.4	17.5
70°-80°	6093.7	11.0
80°-90°	878.1	1.6
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°	55177.0	100.0
0°-180°	55177.0	100.0

Coefficient of Utilization

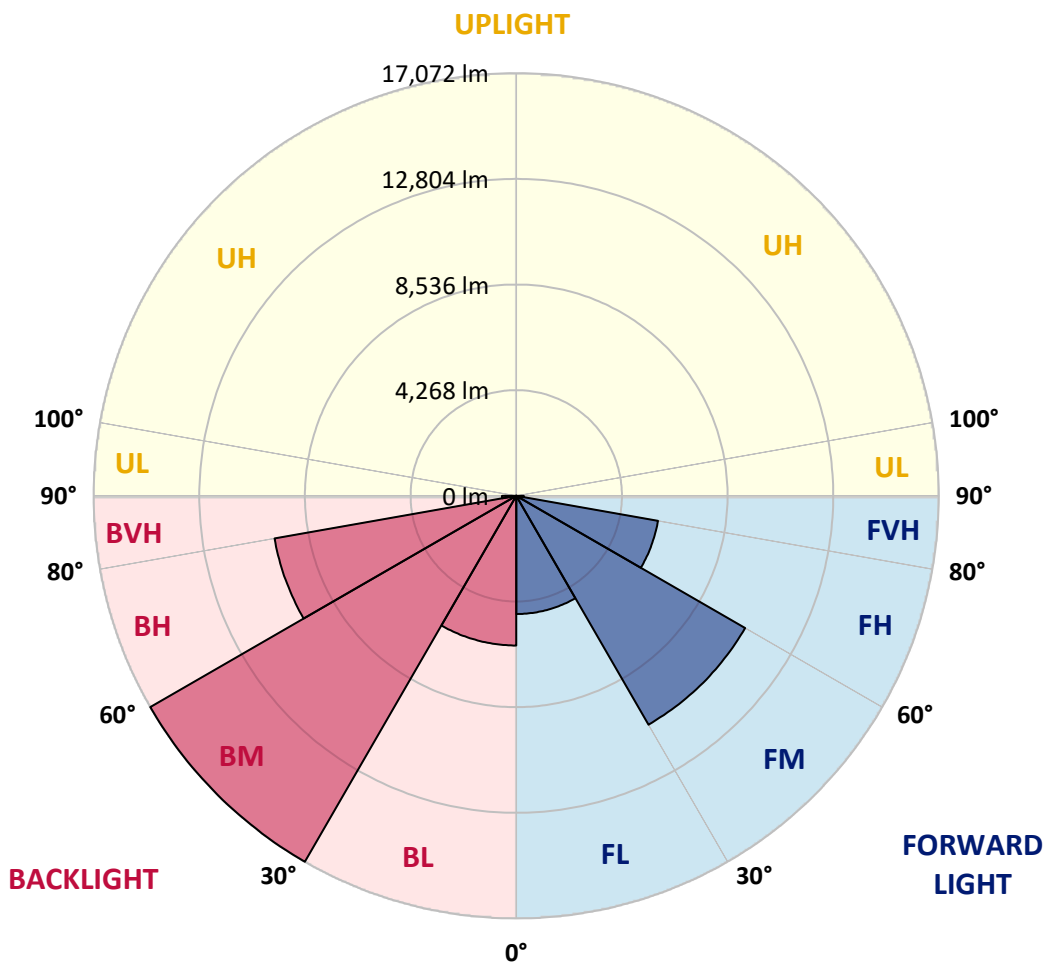


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LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone		Lumens	% Fixture	Zone Rating/Lumen Limit		
				B	U	G
FL	(0°-30°)	4775.1	8.7			
FM	(30°-60°)	10676.2	19.3			
FH	(60°-80°)	5814.2	10.5			G3/7500
FVH	(80°-90°)	304.1	0.6			G3/500
BL	(0°-30°)	6046.9	11.0	B5		
BM	(30°-60°)	17071.6	30.9	B5		
BH	(60°-80°)	9914.8	18.0	B5		G5
BVH	(80°-90°)	574.1	1.0			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°	14267.4	14267.4	14267.4	14267.4	14267.4	14267.4	14267.4	14267.4	14267.4	14267.4	14267.4
2.5°	14294.2	14194.9	14208.3	14313.0	14090.3	14229.8	14165.4	14280.8	14235.2	14299.6	14347.9
5°	14168.1	14074.2	14098.3	14227.1	14050.0	14208.3	14117.1	14229.8	14245.9	14323.7	14369.3
7.5°	14063.4	13972.2	13988.3	14109.0	13996.3	14135.9	14082.2	14232.5	14235.2	14372.0	14406.9
10°	13958.8	13864.9	13886.3	13991.0	13918.5	14068.8	14103.7	14280.8	14321.0	14511.5	14514.2
12.5°	13736.1	13652.9	13663.6	13808.5	13811.2	14028.5	14098.3	14372.0	14455.2	14669.9	14691.3
15°	12858.6	12917.6	13143.0	13325.5	13494.6	13787.0	14025.9	14474.0	14586.7	14847.0	14908.7
17.5°	10733.4	10642.2	10151.1	10411.4	11224.4	12002.6	12415.9	13352.3	14401.5	15118.0	15198.5
20°	7526.8	7671.7	8441.8	8796.0	9375.6	10784.4	12077.7	12617.1	12957.9	14253.9	15265.6
22.5°	5970.4	6013.4	7116.2	8439.1	8873.8	9480.3	11015.1	12815.7	13349.7	13725.3	13891.7
25°	5557.2	5589.4	5766.5	7497.3	8683.3	9327.3	10000.8	12343.4	13811.2	14278.1	14476.7
27.5°	5211.1	5245.9	5420.4	6002.6	8508.9	9327.3	10092.1	11173.5	14259.3	14967.7	15136.8
30°	4953.5	4953.5	5133.2	5629.7	7132.3	9356.8	10282.6	11304.9	13561.6	15837.1	15987.4
32.5°	4717.3	4720.0	4915.9	5393.5	6179.8	9230.7	10550.9	11787.9	13019.6	16706.5	17095.6
35°	4505.3	4513.4	4690.5	5173.5	5938.2	7440.9	10848.8	12407.8	14060.7	16609.9	18780.8
37.5°	4325.6	4330.9	4483.9	4956.1	5734.3	5390.8	11042.0	13153.8	15458.8	17471.3	19132.3
40°	4196.8	4188.7	4298.7	4728.1	5436.5	4926.6	9346.1	13929.3	17119.8	20168.0	20785.2
42.5°	4068.0	4054.5	4164.6	4489.2	3719.1	4797.8	8659.2	14686.0	19033.0	23130.5	23680.5
45°	3917.7	3923.1	4030.4	4027.7	3520.6	4626.1	8734.3	12933.7	21080.4	26160.0	26860.3
47.5°	3837.2	3813.0	3866.7	2924.8	3356.9	4390.0	8702.1	12008.0	22886.3	29055.3	29750.3
50°	3686.9	3681.6	2710.2	2771.9	3193.2	4118.9	8197.6	12340.7	20651.0	31738.6	32441.7
52.5°	3461.5	3056.3	2514.3	2664.6	3029.5	3799.6	5855.1	12477.6	20594.7	31473.0	34950.6
54°	2299.6	2356.0	2433.8	2589.4	2911.4	2986.6	5356.0	12466.8	21574.1	27571.4	33032.0
55°	1317.5	1846.1	2369.4	2527.7	2828.2	2090.3	5162.8	12410.5	22199.3	27740.5	29777.1
57.5°	1140.4	1145.8	1304.1	2109.1	1451.7	1792.5	4615.4	11951.6	23369.3	29294.1	29876.4
60°	99.3	96.6	110.0	150.3	190.5	418.6	2323.8	7666.3	22550.9	30627.7	31532.0
62.5°	40.3	42.9	53.7	72.5	115.4	187.8	1921.3	6794.2	22897.0	31440.8	32430.9
65°	8.1	8.1	13.4	24.2	42.9	112.7	1636.8	6050.9	22719.9	31706.4	33029.3
67.5°	0.0	0.0	8.1	18.8	34.9	91.2	1416.8	5567.9	21708.3	31615.2	32806.6
70°	0.0	0.0	8.1	18.8	32.2	88.6	1212.9	5138.6	19199.4	30659.9	31980.1
72.5°	0.0	0.0	8.1	16.1	29.5	80.5	1038.5	4537.5	16274.5	28360.3	30158.1
75°	0.0	0.0	8.1	16.1	26.8	72.5	874.8	3893.5	13596.5	24442.6	26602.7
77.5°	0.0	0.0	8.1	16.1	24.2	64.4	686.9	3110.0	10677.0	17723.5	18882.7
80°	0.0	0.0	8.1	16.1	21.5	51.0	507.2	1964.2	5922.1	8989.2	9466.9
82.5°	0.0	0.0	5.4	13.4	18.8	32.2	241.5	743.3	2790.7	4116.3	3992.8
85°	0.0	0.0	5.4	13.4	16.1	24.2	104.7	187.8	928.4	1365.8	1271.9
87.5°	0.0	0.0	5.4	10.7	13.4	16.1	26.8	32.2	295.2	394.5	407.9
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):

	94°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	14267.4	14267.4	14267.4	14267.4	14267.4	14267.4	14267.4	14267.4	14267.4	14267.4	14267.4
2.5°	14315.7	14315.7	14313.0	14382.7	14294.2	14302.2	14219.1	14433.7	14409.6	14342.5	14423.0
5°	14331.8	14345.2	14342.5	14377.4	14307.6	14350.5	14235.2	14447.1	14412.3	14358.6	14441.8
7.5°	14398.8	14423.0	14404.2	14465.9	14326.4	14369.3	14251.3	14436.4	14401.5	14323.7	14412.3
10°	14543.7	14567.9	14530.3	14559.8	14412.3	14390.8	14245.9	14439.1	14364.0	14304.9	14414.9
12.5°	14731.6	14761.1	14686.0	14680.6	14492.8	14449.8	14240.5	14372.0	14262.0	14213.7	14313.0
15°	14940.9	14975.8	14887.2	14868.4	14661.8	14519.6	14219.1	14248.6	14090.3	14025.9	14130.5
17.5°	15214.6	15246.8	15179.7	15169.0	14900.6	14659.1	14189.5	14092.9	13870.2	13816.6	13872.9
20°	15673.4	15694.9	15606.4	15525.9	15131.4	14734.3	14141.2	13889.0	13548.2	13435.5	13499.9
22.5°	14264.7	14436.4	16177.9	15877.4	15303.1	14812.1	14020.5	13599.2	13121.6	12909.6	12952.5
25°	14449.8	14465.9	15126.0	16293.3	15491.0	14863.1	13878.3	13239.6	12582.2	12273.6	12327.3
27.5°	15120.7	15101.9	14841.6	16338.9	15713.7	14892.6	13701.2	12861.3	12048.2	11677.9	11691.3
30°	15990.1	15960.6	15566.1	14771.8	16033.0	14903.3	13545.5	12426.6	11573.3	11178.8	11168.1
32.5°	17178.8	17095.6	16483.8	15386.3	14683.3	14975.8	13325.5	12013.3	11119.8	10730.7	10701.2
35°	19003.5	18850.5	17736.9	16167.2	14449.8	14975.8	13025.0	11567.9	10701.2	10330.9	10309.4
37.5°	21265.5	21305.8	19338.9	17041.9	14809.4	13572.4	12665.4	11152.0	10338.9	10011.6	10011.6
40°	20860.3	21394.3	21198.4	17938.2	15179.7	13347.0	12279.0	10752.2	10038.4	9788.9	9821.1
42.5°	23535.6	23329.0	23355.9	18837.1	15440.0	13116.2	11860.4	10381.9	9772.8	9560.8	9584.9
45°	26503.4	26270.0	21380.9	19642.1	15560.7	12772.7	11436.4	10000.8	9480.3	9303.2	9367.6
47.5°	29433.6	29224.3	23479.3	19446.2	15448.0	12246.8	10913.2	9670.8	9171.7	9045.6	9142.2
50°	32269.9	31974.8	25741.4	17382.7	15048.2	11519.6	10379.2	9324.6	8903.3	8828.2	8900.7
52.5°	34800.3	34408.6	28032.9	17694.0	13145.7	10784.4	9904.2	8991.9	8659.2	8576.0	8648.4
54°	36064.2	35825.4	29312.9	17728.9	12601.0	10328.2	9619.8	8779.9	8522.3	8452.5	8492.8
55°	33912.2	34389.8	30072.3	17699.4	12206.5	10051.8	9432.0	8640.4	8425.7	8350.6	8390.8
57.5°	30115.2	29600.0	28116.1	17337.1	11133.2	9359.5	8881.9	8286.2	8138.6	8042.0	8098.3
60°	31070.5	30976.6	25666.2	16540.2	9960.6	8584.0	8339.8	7872.9	7773.7	7693.2	7768.3
62.5°	32068.7	32007.0	26058.0	15303.1	8793.3	7822.0	7717.3	7389.9	7330.9	7296.0	7314.8
65°	32608.0	32213.6	26047.3	13647.5	7722.7	7041.1	7025.0	6780.8	6807.7	6791.6	6869.4
67.5°	32380.0	31958.7	24896.1	12453.4	6716.4	6150.2	6201.2	6099.2	6198.5	6228.1	6287.1
70°	31188.6	31325.4	22387.2	11302.3	5715.5	5178.9	5339.9	5326.4	5471.3	5584.0	5678.0
72.5°	29541.0	29015.0	18764.7	9606.4	4183.3	3684.2	3963.3	4151.1	4312.1	4446.3	4534.9
75°	25143.0	24525.8	13854.1	7489.2	3029.5	2541.1	2616.3	2699.4	2804.1	3112.7	3295.2
77.5°	17237.8	16980.2	9963.3	5648.4	1929.3	1532.2	1824.7	1991.0	2079.6	2066.2	2098.4
80°	8838.9	8793.3	5898.0	3378.3	1301.4	1121.6	1328.3	1344.4	1486.6	1596.6	1602.0
82.5°	3563.5	3740.6	2356.0	1851.5	904.3	847.9	936.5	1054.6	1175.3	1239.7	1255.8
85°	1261.2	1231.7	716.5	869.4	574.2	593.0	662.8	797.0	923.1	939.2	904.3
87.5°	338.1	351.5	153.0	319.3	314.0	343.5	381.0	434.7	525.9	552.8	525.9
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)