

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: STREETWORKS

Report Number: P510857

Luminaire Tested: **CST-CA8-480-750-U-T2**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510857  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-10)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA8-480-750-U-T2  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (8) 5000K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 71837 lumens  
Efficiency: N/A  
Efficacy: 149.4 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type II - Short  
BUG Rating: B4 - U0 - G5

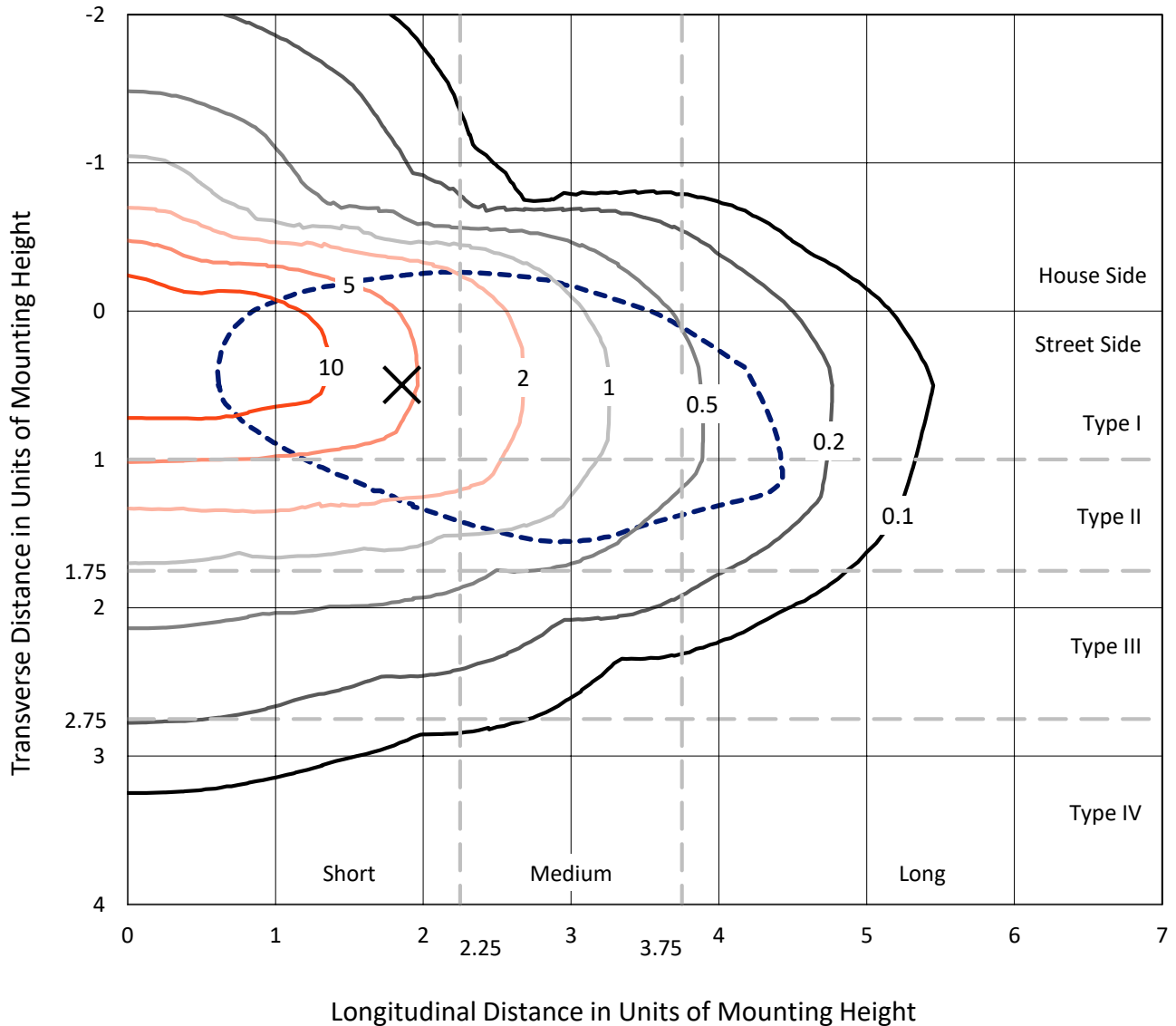
Input Watts (W): 480.8  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



REPORT NUMBER: P510857  
 CATALOG NUMBER: CST-CA8-480-750-U-T2

### Iso-Footcandle Lines of Horizontal Illumination

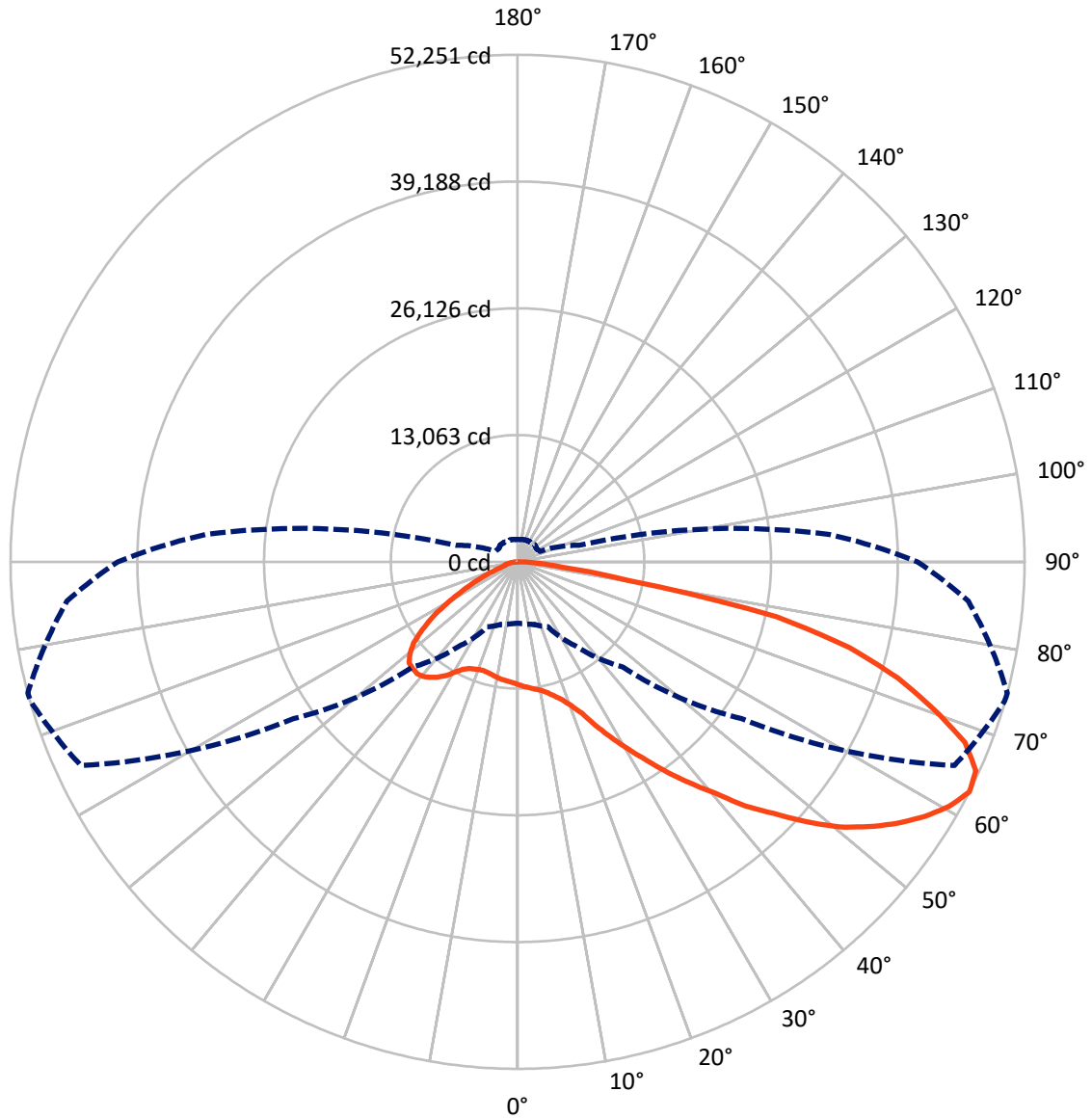
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 16.5 fc  
 Type II - Short - N/A

REPORT NUMBER: P510857  
CATALOG NUMBER: CST-CA8-480-750-U-T2

### Luminous Intensity Polar Plot



— Vertical Plane Through 75-Deg Lateral    - - - Horizontal Cone Through 62.5-Deg Vertical

REPORT NUMBER: P510857  
 CATALOG NUMBER: CST-CA8-480-750-U-T2

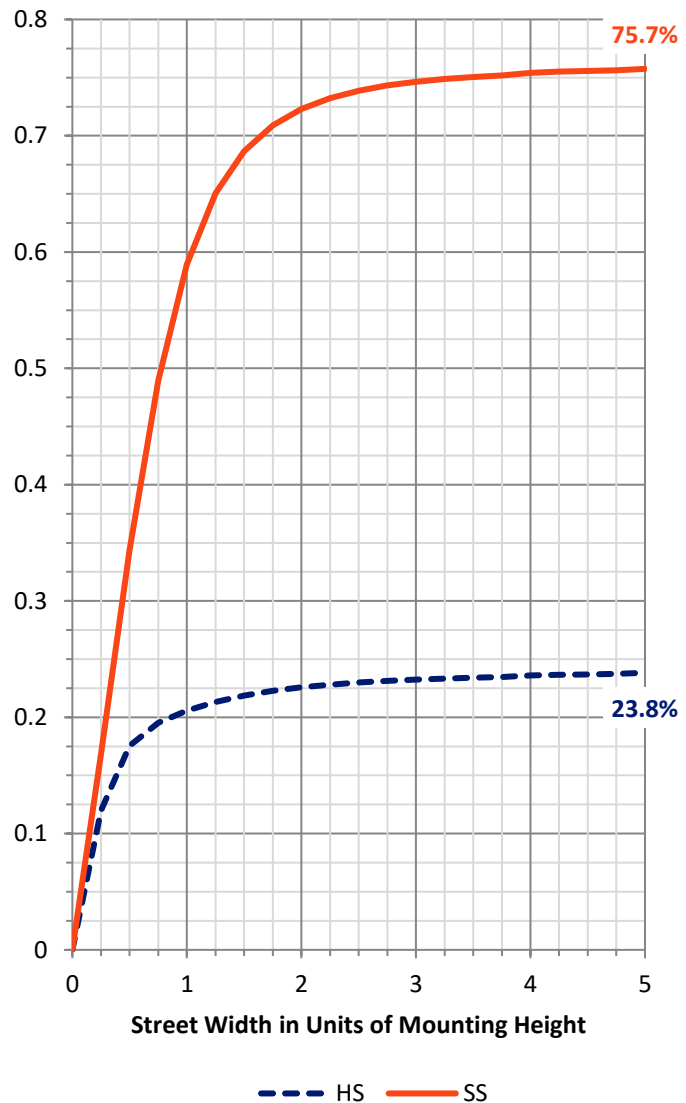
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	17404.8	0.0	17404.8
	% Fixture	24.2	0.0	24.2
<b>Street Side</b>	Lumens	54432.2	0.0	54432.2
	% Fixture	75.8	0.0	75.8
<b>Total</b>	Lumens	71837.0	0.0	71837.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1218.2	1.7
10°-20°	3697.3	5.1
20°-30°	6376.9	8.9
30°-40°	9402.8	13.1
40°-50°	12395.0	17.3
50°-60°	14587.8	20.3
60°-70°	14513.4	20.2
70°-80°	8463.8	11.8
80°-90°	1181.8	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°	71837.0	100.0
0°-180°	71837.0	100.0

**Coefficient of Utilization**

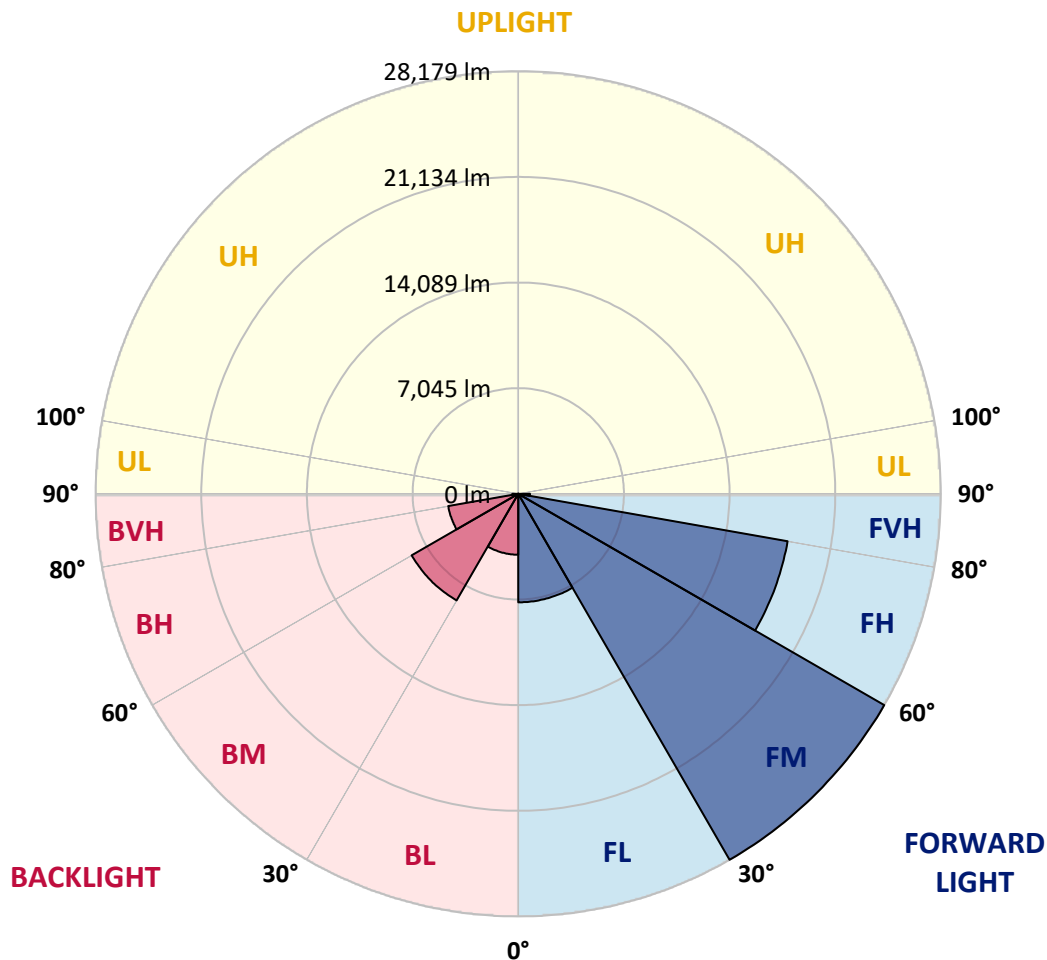


REPORT NUMBER: P510857  
 CATALOG NUMBER: CST-CA8-480-750-U-T2

**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	7233.7	10.1			
FM (30°-60°)	28178.7	39.2			
FH (60°-80°)	18235.5	25.4			G5
FVH (80°-90°)	784.2	1.1			G5
BL (0°-30°)	4058.7	5.6	B4/5000		
BM (30°-60°)	8206.9	11.4	B4/8500		
BH (60°-80°)	4741.7	6.6	B4/5000		G4/5000
BVH (80°-90°)	397.6	0.6			G3/500
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

**BUG Rating: B4-U0-G5**  
 Type II Short





REPORT NUMBER: P510857  
 CATALOG NUMBER: CST-CA8-480-750-U-T2

**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	45°	55°	65°	74°	75°	85°
0°	12663.2	12663.2	12663.2	12663.2	12663.2	12663.2	12663.2	12663.2	12663.2	12663.2	12663.2
2.5°	13356.6	13301.9	13309.3	13270.9	13213.2	13170.3	13058.0	12936.7	12864.3	12858.4	12754.9
5°	14027.9	14045.6	14050.0	13927.3	13806.1	13668.6	13497.1	13263.5	13072.8	13043.2	12842.1
7.5°	14640.0	14638.5	14629.6	14561.6	14505.4	14301.4	13958.4	13591.7	13281.2	13253.1	12926.4
10°	15266.8	15262.4	15173.7	15059.8	14932.7	14744.9	14450.7	14011.6	13508.9	13472.0	13004.8
12.5°	15949.9	15901.1	15844.9	15707.4	15556.6	15231.4	14922.3	14444.8	13919.9	13853.4	13143.7
15°	16513.2	16462.9	16384.6	16291.4	16133.2	15884.8	15556.6	14990.4	14427.1	14362.0	13455.7
17.5°	17070.6	17046.9	16990.7	16891.7	16770.5	16556.1	16254.5	15774.0	15036.2	14956.4	13974.6
20°	17527.4	17471.3	17429.9	17475.7	17486.0	17327.8	17162.3	16758.6	15945.5	15822.7	14611.9
22.5°	17787.7	17775.8	18002.0	18170.6	18238.6	18274.1	18222.3	17897.1	17160.8	16946.4	15499.0
25°	18034.6	18015.3	18322.9	18744.2	19144.9	19348.9	19486.4	19529.3	18853.6	18660.0	16925.7
27.5°	18042.0	18095.2	18541.7	19248.4	19859.0	20481.5	21140.9	21216.3	20623.4	20469.6	18549.1
30°	18081.9	18105.5	18547.6	19359.3	20630.8	21628.8	22487.8	22912.1	22400.5	22329.6	20336.6
32.5°	17574.7	17605.8	18293.3	19553.0	21213.3	22816.0	23955.9	24585.7	24458.6	24368.4	22243.8
35°	17046.9	17073.5	17871.9	19278.0	21646.5	23893.8	25282.1	26519.6	26751.7	26683.7	24371.3
37.5°	16219.0	16307.7	17144.5	18949.7	21721.9	24686.3	26547.7	28446.0	29146.9	28942.8	26621.6
40°	15320.1	15385.1	16359.4	18262.2	21637.6	25206.7	27791.1	30578.0	31426.7	31317.3	28855.6
42.5°	14184.6	14359.0	15334.8	17384.0	21204.4	25530.5	28941.3	32995.3	34228.4	34374.8	30907.7
45°	13228.0	13223.6	14129.9	16112.5	20419.4	25607.4	29999.9	35439.3	37243.0	36968.0	33620.7
47.5°	12102.9	12148.7	13094.9	14846.9	19261.7	25363.4	30824.9	38328.2	40154.2	40004.8	35845.9
50°	9499.3	9829.0	11620.9	13758.8	17696.0	24683.3	31512.4	41141.8	42884.9	42952.9	37868.4
52.5°	8189.3	8316.5	9305.6	12663.2	16306.2	23541.9	32266.5	44307.2	45524.0	45351.0	40164.5
55°	7664.5	7732.5	8207.1	10695.4	14962.3	21775.1	32628.7	47197.7	47582.1	47554.0	42054.0
57.5°	7284.5	7336.2	7673.3	8925.6	13486.7	19507.1	32322.6	49078.3	49675.6	49492.3	43837.1
60°	6736.0	6777.4	7280.1	8043.0	11968.3	17217.0	30440.5	49931.4	51194.0	51126.0	45413.1
62.5°	6323.5	6394.4	6675.4	7390.9	10671.7	15330.4	28197.7	49665.3	52190.5	52251.1	46616.6
65°	5887.3	5950.9	6188.9	6814.3	9496.3	14090.0	25778.9	48331.7	51732.2	51893.3	46811.8
67.5°	5349.2	5397.9	5680.3	6221.5	8122.8	12849.5	23051.1	45973.5	49189.2	49708.1	44869.1
70°	4672.0	4689.8	5035.7	5403.9	6744.8	10979.2	18328.8	42113.2	45509.2	45519.6	41200.9
72.5°	3718.4	3733.2	3824.8	4104.3	5066.8	8689.1	13472.0	35187.9	41035.3	40959.9	36617.6
75°	2528.2	2658.3	2976.2	3242.3	3654.8	6101.7	8378.6	23707.5	34766.6	35358.0	30078.3
77.5°	1997.4	2009.3	2140.8	2384.8	2741.1	4558.2	4695.7	13117.1	25919.3	27325.4	23642.5
80°	1392.7	1413.4	1342.5	1401.6	1911.7	3119.6	2744.1	5708.4	10809.2	11541.1	14194.9
82.5°	663.8	687.5	789.5	733.3	950.7	1326.2	1448.9	2949.6	4669.1	4791.8	5526.6
85°	437.6	437.6	439.1	415.5	554.4	578.1	657.9	1258.2	2279.8	2356.7	2343.4
87.5°	140.5	155.2	150.8	175.9	212.9	192.2	201.1	394.8	782.1	774.7	647.6
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P510857  
 CATALOG NUMBER: CST-CA8-480-750-U-T2

**CANDELA DISTRIBUTION (continued):**

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	12663.2	12663.2	12663.2	12663.2	12663.2	12663.2	12663.2	12663.2	12663.2	12663.2	12663.2
2.5°	12681.0	12620.3	12478.4	12354.2	12231.5	12138.4	12058.5	11952.1	11901.8	11856.0	11952.1
5°	12717.9	12610.0	12355.7	12101.4	11867.8	11696.3	11591.3	11514.4	11445.0	11445.0	11477.5
7.5°	12760.8	12614.4	12250.7	11890.0	11539.6	11344.4	11195.1	11097.5	11041.3	11044.3	11113.8
10°	12788.9	12564.2	12131.0	11644.5	11263.1	10949.7	10803.3	10662.8	10556.4	10492.8	10563.8
12.5°	12821.4	12547.9	11969.8	11421.3	10957.1	10602.2	10297.6	10192.7	10089.2	10009.3	10047.8
15°	13022.5	12610.0	11835.3	11137.4	10599.3	10157.2	9758.0	9565.8	9536.2	9481.5	9494.8
17.5°	13350.7	12777.1	11748.0	10790.0	10169.0	9647.1	9141.5	8893.1	8833.9	8805.9	8820.6
20°	13840.1	13094.9	11774.7	10546.0	9684.1	9100.1	8446.6	8155.3	7958.7	7970.5	8028.2
22.5°	14588.2	13608.0	11919.5	10278.4	9159.2	8393.4	7734.0	7337.7	7139.6	7096.7	7161.8
25°	15779.9	14434.4	12079.2	10022.6	8652.1	7630.5	6900.1	6471.3	6217.0	6200.8	6273.2
27.5°	17307.1	15701.5	12426.7	9800.9	8022.3	6713.8	5987.9	5621.2	5350.6	5318.1	5294.5
30°	18869.9	17109.0	13055.0	9463.8	7287.5	5767.6	5136.3	4849.4	4546.3	4423.6	4450.2
32.5°	20525.8	18420.4	13791.3	9227.2	6465.4	4935.2	4386.7	4113.1	3835.2	3657.8	3616.4
35°	22193.5	19724.5	14410.8	8873.9	5686.3	4274.3	3749.4	3467.0	3224.6	3079.7	3069.3
37.5°	24145.1	21081.7	14907.6	8498.3	4877.5	3756.8	3125.5	2962.9	2846.1	2718.9	2732.2
40°	26099.7	22663.7	15305.3	7877.4	4206.3	3200.9	2659.8	2692.3	2717.5	2611.0	2602.1
42.5°	27723.1	23992.9	15487.1	7073.1	3611.9	2717.5	2454.3	2602.1	2711.5	2642.1	2633.2
45°	29371.6	25112.1	15416.2	6075.1	3118.1	2486.8	2438.0	2588.8	2729.3	2713.0	2705.6
47.5°	31163.5	26578.7	15293.4	4938.1	2764.8	2464.6	2473.5	2544.5	2721.9	2751.5	2739.6
50°	33354.6	27928.6	14567.5	3845.5	2593.3	2500.1	2553.3	2516.4	2667.2	2727.8	2738.2
52.5°	35535.4	28968.0	13596.1	3332.5	2525.3	2534.1	2664.2	2538.6	2605.1	2658.3	2707.1
55°	37217.9	30026.5	12024.5	3023.5	2503.1	2550.4	2695.3	2585.9	2584.4	2584.4	2600.7
57.5°	38940.3	31444.4	10452.9	2823.9	2464.6	2568.1	2658.3	2594.7	2574.0	2544.5	2525.3
60°	40139.4	31969.3	8433.3	2692.3	2424.7	2543.0	2554.8	2546.0	2482.4	2454.3	2432.1
62.5°	41203.9	32254.6	6566.0	2541.5	2370.0	2483.9	2421.8	2402.5	2365.6	2297.6	2309.4
65°	40918.5	31642.5	5003.2	2371.5	2331.6	2412.9	2305.0	2259.1	2262.1	2191.1	2214.8
67.5°	39082.3	28897.0	3592.7	2111.3	2226.6	2272.4	2171.9	2137.9	2087.6	2052.1	2084.7
70°	35372.7	25616.2	2423.2	1752.0	1987.1	2086.1	2019.6	1960.5	1882.1	1858.5	1893.9
72.5°	29772.2	21383.3	1672.2	1409.0	1715.0	1843.7	1818.5	1757.9	1701.7	1759.4	1828.9
75°	24458.6	15819.8	1364.6	1154.7	1318.8	1536.1	1610.1	1627.8	1796.4	2358.2	2415.8
77.5°	17605.8	9806.8	1227.1	938.8	1052.7	1228.6	1376.5	1437.1	2194.1	2100.9	2096.5
80°	10265.1	5715.8	935.9	740.7	851.6	900.4	1076.3	1687.0	1892.5	1623.4	1583.5
82.5°	4683.8	2522.3	652.0	592.9	591.4	595.8	733.3	1623.4	1451.9	1278.9	1231.6
85°	1722.4	887.1	396.2	343.0	393.3	341.5	480.5	1190.2	841.3	828.0	690.5
87.5°	424.3	181.9	134.5	112.4	91.7	87.2	146.4	391.8	205.5	187.8	180.4
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)