

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: P510590

Luminaire Tested: **CST-CA10-760-727-U-T4-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510590  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-151-17)  
Test Lab: COOPER LIGHTING SOLUTIONS  
Issue Date: 4/6/2021  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: STREETWORKS  
Catalog Number: CST-CA10-760-727-U-T4-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (10) 2700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 79827 lumens  
Efficiency: N/A  
Efficacy: 104.8 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U0 - G5

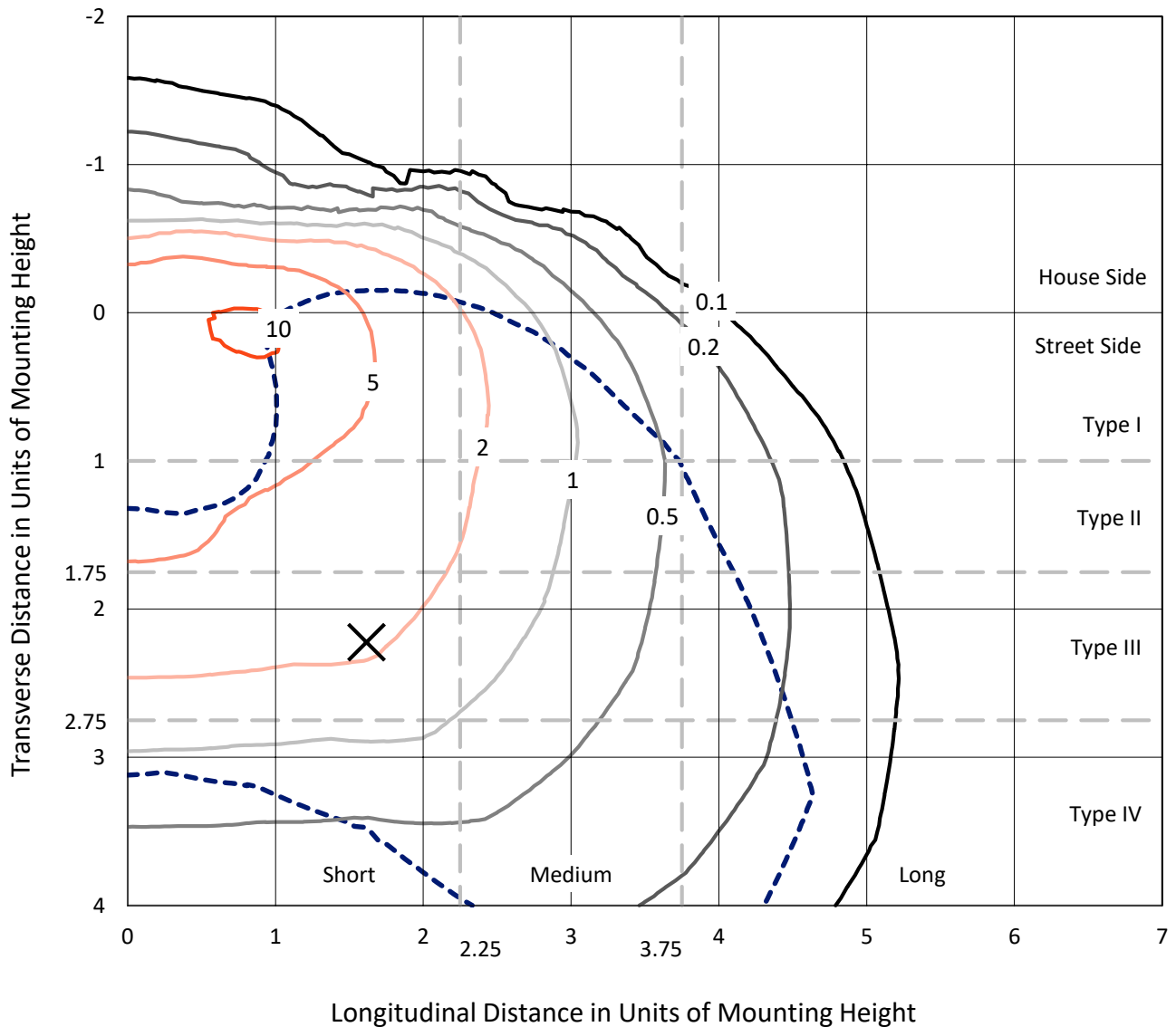
Input Watts (W): 761.9  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

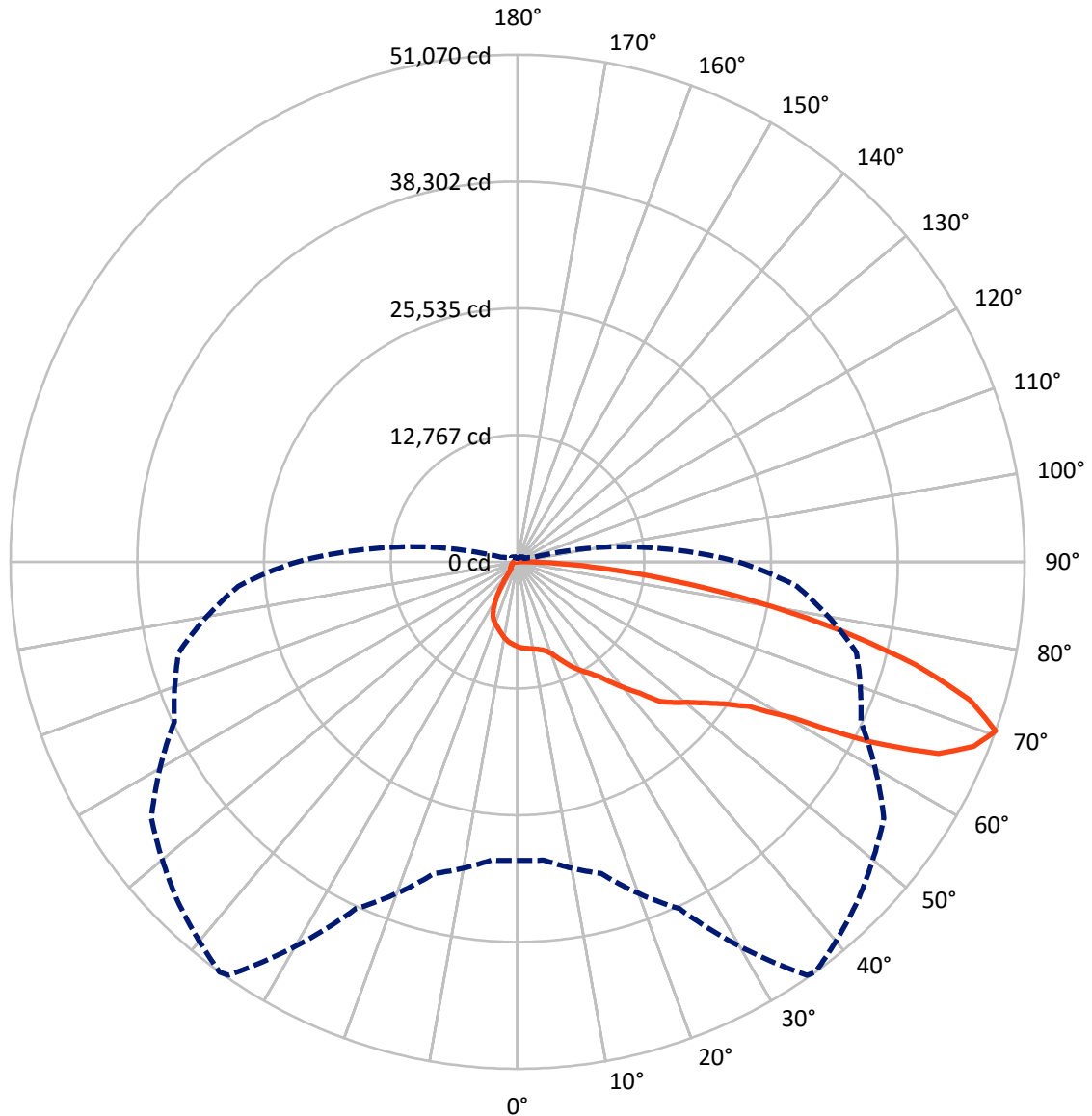
✕ Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 10.8 fc  
 Type IV - Short - N/A

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### Luminous Intensity Polar Plot



— Vertical Plane Through 36-Deg Lateral    - - - Horizontal Cone Through 70-Deg Vertical

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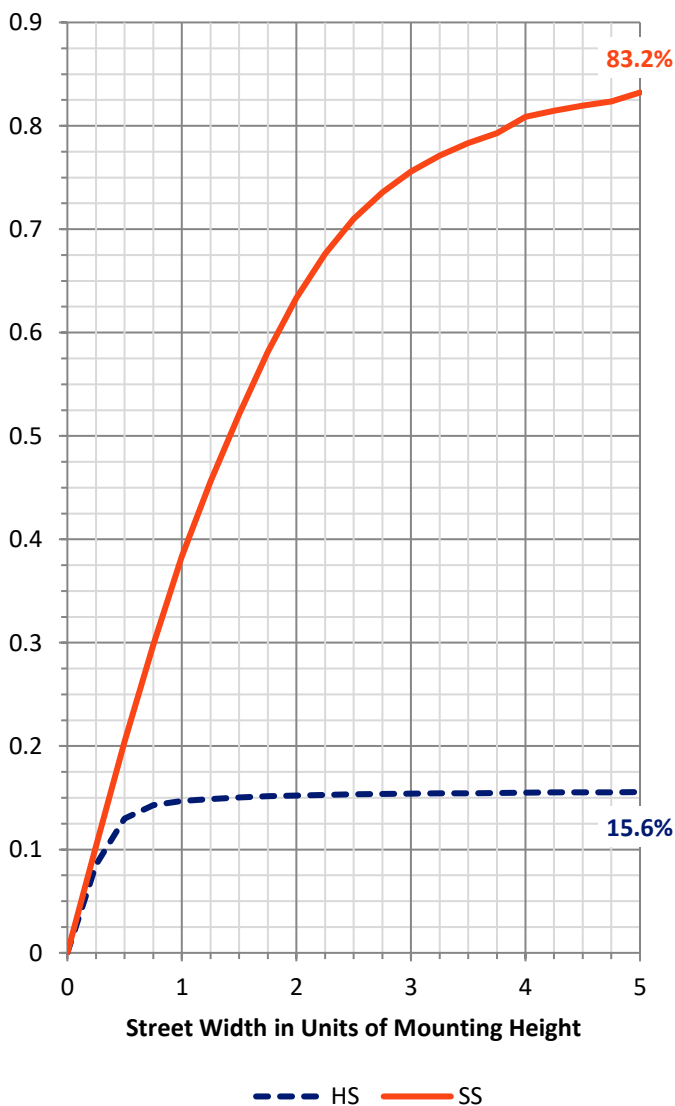
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	12597.3	0.0	12597.3
	% Fixture	15.8	0.0	15.8
<b>Street Side</b>	Lumens	67229.7	0.0	67229.7
	% Fixture	84.2	0.0	84.2
<b>Total</b>	Lumens	79827.0	0.0	79827.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	811.2	1.0
10°-20°	2412.3	3.0
20°-30°	4338.0	5.4
30°-40°	6864.8	8.6
40°-50°	10728.5	13.4
50°-60°	15405.9	19.3
60°-70°	20896.6	26.2
70°-80°	15465.7	19.4
80°-90°	2904.0	3.6
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°	79827.0	100.0
0°-180°	79827.0	100.0

**Coefficient of Utilization**

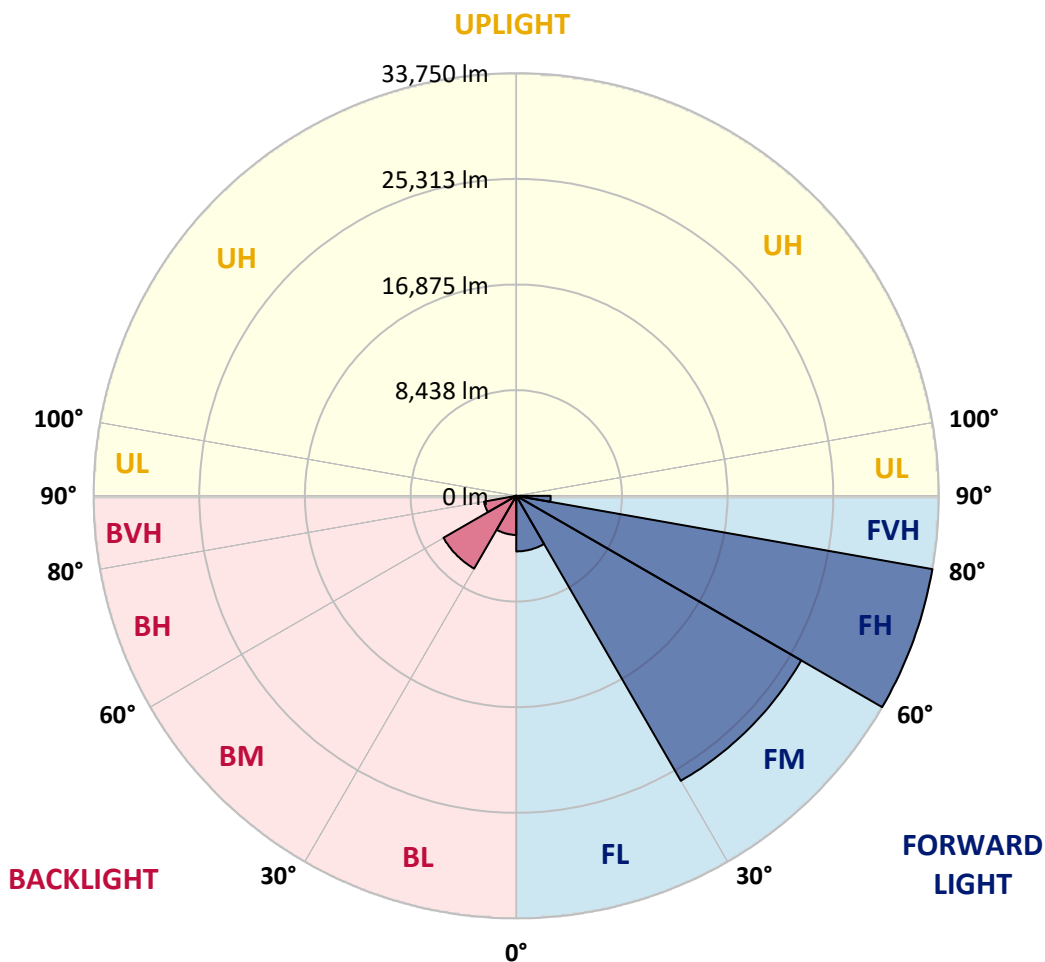


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4439.9	5.6			
FM (30°-60°)	26286.3	32.9			
FH (60°-80°)	33750.1	42.3			G5
FVH (80°-90°)	2753.4	3.4			G5
BL (0°-30°)	3121.5	3.9	B4/5000		
BM (30°-60°)	6712.8	8.4	B4/8500		
BH (60°-80°)	2612.3	3.3	B4/5000		G4/5000
BVH (80°-90°)	150.6	0.2			G2/225
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

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





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**CANDELA DISTRIBUTION (FULL):**

	0°	5°	15°	25°	35°	36°	45°	55°	65°	75°	85°
0°	8553.1	8553.1	8553.1	8553.1	8553.1	8553.1	8553.1	8553.1	8553.1	8553.1	8553.1
2.5°	8726.3	8707.9	8693.1	8698.7	8687.6	8695.0	8678.4	8658.1	8610.2	8589.9	8580.7
5°	8803.7	8798.2	8783.4	8772.4	8752.1	8744.7	8726.3	8742.9	8717.1	8650.7	8612.0
7.5°	8849.8	8847.9	8831.3	8807.4	8818.4	8827.7	8846.1	8820.3	8787.1	8755.8	8676.5
10°	8870.1	8870.1	8849.8	8862.7	8919.8	8925.3	8934.6	8951.1	8919.8	8873.7	8794.5
12.5°	8921.7	8918.0	8925.3	8967.7	9026.7	9039.6	9085.7	9085.7	9089.4	9061.7	8969.6
15°	9050.7	9050.7	9067.2	9105.9	9207.3	9214.7	9282.9	9343.7	9351.1	9310.5	9240.5
17.5°	9349.2	9341.8	9332.6	9356.6	9465.3	9469.0	9587.0	9664.4	9684.6	9728.9	9717.8
20°	9916.8	9909.5	9907.6	9909.5	9902.1	9891.0	10007.1	10090.1	10193.3	10270.7	10309.4
22.5°	10729.6	10713.0	10713.0	10622.7	10552.7	10563.7	10582.1	10628.2	10764.6	10901.0	11046.6
25°	11605.0	11593.9	11603.1	11372.8	11278.8	11315.6	11291.7	11363.5	11542.3	11660.3	11815.1
27.5°	12320.0	12336.6	12285.0	12106.2	12045.4	12073.1	12017.8	12224.2	12421.4	12627.8	12861.8
30°	13210.2	13121.7	12994.5	12777.1	12755.0	12758.6	12755.0	13086.7	13495.8	13790.7	14115.0
32.5°	14373.1	14387.8	14102.1	13589.8	13401.8	13376.0	13449.7	13936.3	14489.2	15143.4	15571.0
35°	15548.8	15572.8	15364.6	14830.1	14293.8	14212.7	14104.0	14736.1	15534.1	16846.3	17491.3
37.5°	16796.5	16881.3	16634.3	16157.0	15521.2	15445.6	14931.5	15552.5	16732.0	18862.4	19708.4
40°	18466.2	18375.9	18077.4	17471.0	16879.4	16757.8	16160.7	16486.9	18272.7	21387.3	22001.0
42.5°	19697.3	19671.5	19419.0	18820.1	18224.8	18127.1	17646.1	18000.0	20213.3	23947.1	24221.7
45°	20674.1	20832.5	20827.0	20451.1	20115.6	20060.4	19776.5	20298.1	22559.4	26363.2	26228.7
47.5°	21542.1	21639.8	21483.1	21319.1	21162.4	21180.9	21391.0	22463.5	24957.0	28473.4	27878.1
50°	22963.0	22837.7	22135.5	22010.2	22231.3	22240.5	22880.0	24531.3	27598.0	30297.9	29275.0
52.5°	24857.5	24721.1	23278.1	23064.3	23587.7	23626.4	24689.8	26591.7	30321.8	32041.3	30664.6
55°	27677.2	27360.2	25814.0	24855.7	25095.3	25251.9	26540.1	28572.9	32454.1	33578.3	31716.9
57.5°	31140.1	31370.5	30578.0	28412.5	27415.5	27474.5	28657.7	30469.3	34335.7	34923.6	32332.5
60°	34800.2	34744.9	35076.6	34164.3	32255.1	31938.1	31335.4	32404.3	35793.5	36057.0	32966.4
62.5°	36805.3	37127.8	38233.5	38416.0	40139.1	39971.4	35863.5	34803.8	37477.9	36768.4	33139.7
65°	36794.2	36934.3	38992.8	41256.0	46639.2	46591.3	44682.0	38274.1	38733.0	37148.1	32793.2
67.5°	34416.8	34634.3	37041.2	41462.4	49643.2	49586.0	48266.5	43152.3	39127.4	36691.0	31176.9
70°	30082.2	30156.0	32503.9	38556.1	50850.3	51069.6	48390.0	45024.8	38146.9	35332.8	28230.1
72.5°	24817.0	24664.0	26960.3	32925.9	47776.3	47645.4	46344.3	42789.3	36495.7	32695.5	23023.8
75°	18272.7	18698.4	20758.8	26436.9	40905.8	41385.0	41961.8	39368.8	32413.6	26945.6	15921.1
77.5°	12065.7	12607.5	14690.0	19822.6	32384.1	33128.6	34623.2	33484.3	26368.7	19328.7	7581.8
80°	6234.7	6643.8	8518.0	13153.0	23215.5	24289.9	27030.3	25360.6	18694.7	8739.2	1697.3
82.5°	2359.0	2305.5	3816.7	7528.4	14885.4	15862.1	17854.4	15207.9	6653.0	1535.2	788.8
85°	1035.7	1096.5	1581.2	3433.4	8510.7	8637.8	10114.0	5928.7	974.9	733.5	536.3
87.5°	447.8	514.2	663.5	987.8	2871.3	3315.4	4102.4	1883.5	294.9	254.3	269.1
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°	8553.1	8553.1	8553.1	8553.1	8553.1	8553.1	8553.1	8553.1	8553.1	8553.1	8553.1
2.5°	8564.1	8553.1	8534.6	8488.6	8413.0	8403.8	8396.4	8389.0	8374.3	8381.7	8424.1
5°	8582.6	8562.3	8495.9	8429.6	8363.2	8304.3	8232.4	8204.8	8167.9	8143.9	8188.2
7.5°	8645.2	8602.8	8505.1	8414.8	8234.2	8147.6	8055.5	7946.7	7869.3	7819.6	7863.8
10°	8750.3	8696.8	8575.2	8389.0	8177.1	7939.4	7777.2	7596.6	7449.1	7408.6	7449.1
12.5°	8921.7	8842.4	8700.5	8448.0	8072.1	7760.6	7452.8	7215.1	6977.4	6909.2	6929.4
15°	9199.9	9137.3	8919.8	8571.5	8073.9	7598.4	7141.4	6758.0	6446.6	6337.9	6330.5
17.5°	9645.9	9579.6	9328.9	8816.6	8140.2	7471.3	6835.4	6251.2	5779.4	5539.9	5501.2
20°	10285.4	10193.3	9813.6	9177.8	8284.0	7416.0	6551.6	5766.5	5033.1	4583.4	4515.2
22.5°	10996.8	10899.1	10338.9	9456.1	8387.2	7307.2	6280.7	5230.3	4264.6	3715.4	3638.0
25°	11881.4	11667.6	10842.0	9719.6	8363.2	7078.7	5840.3	4502.3	3455.5	2980.0	2928.4
27.5°	12755.0	12484.0	11354.3	9857.9	8258.2	6715.7	5195.2	3650.9	2705.4	2368.2	2325.8
30°	13838.6	13315.2	11809.5	9922.4	7992.8	6172.0	4330.9	2775.5	2025.4	1793.2	1752.6
32.5°	15126.8	14334.4	12237.1	9850.5	7550.5	5342.7	3367.0	2032.8	1505.7	1360.1	1358.2
35°	16826.0	15583.9	12707.0	9614.6	6872.3	4448.8	2360.8	1389.6	1174.0	1124.2	1133.4
37.5°	18812.7	17275.7	13184.4	9227.6	6105.6	3403.9	1573.9	1070.7	1032.0	1033.9	1035.7
40°	20908.1	19144.4	13827.5	8683.9	5175.0	2464.0	1133.4	962.0	960.2	978.6	984.1
42.5°	22909.5	20959.7	14620.0	7959.6	4200.1	1629.2	982.3	917.8	893.8	901.2	906.7
45°	24769.1	22517.0	15294.5	7253.8	3155.1	1162.9	963.9	866.2	829.3	825.6	829.3
47.5°	26267.4	23764.7	15705.5	6424.5	2248.4	965.7	925.2	818.3	766.7	755.6	750.1
50°	27408.1	24691.7	15854.8	5484.6	1520.4	921.5	873.6	763.0	700.3	702.2	702.2
52.5°	28521.3	25533.9	15681.5	4537.3	1118.7	882.8	838.5	718.7	652.4	687.4	696.6
55°	29323.0	25887.7	15176.6	3512.6	932.5	834.8	799.8	667.1	621.1	678.2	696.6
57.5°	29791.1	26166.0	14249.6	2535.9	855.1	788.8	750.1	619.2	576.8	591.6	600.8
60°	30082.2	25777.1	13024.0	1734.2	814.6	751.9	700.3	587.9	530.8	495.7	490.2
62.5°	29921.9	24804.1	11409.6	1192.4	772.2	711.4	657.9	558.4	482.8	436.8	433.1
65°	28615.3	23003.5	8759.5	965.7	746.4	692.9	632.1	530.8	449.7	405.4	399.9
67.5°	26191.8	19767.3	5116.0	858.8	735.3	674.5	611.9	505.0	431.2	383.3	376.0
70°	22209.2	14868.8	1713.9	766.7	733.5	672.7	595.3	486.5	411.0	361.2	353.8
72.5°	16022.5	8971.4	834.8	674.5	685.6	645.0	582.4	471.8	398.1	335.4	322.5
75°	9105.9	2921.1	753.8	582.4	637.7	615.5	575.0	473.6	403.6	304.1	289.3
77.5°	2591.2	853.3	728.0	495.7	602.6	635.8	538.1	427.6	412.8	282.0	263.5
80°	875.4	759.3	702.2	385.2	486.5	525.2	466.3	376.0	416.5	256.2	237.7
82.5°	702.2	763.0	589.7	307.8	370.4	398.1	370.4	337.3	337.3	228.5	213.8
85°	562.1	707.7	374.1	245.1	276.4	305.9	261.7	252.5	235.9	191.7	186.1
87.5°	326.2	221.2	154.8	125.3	116.1	117.9	101.4	121.6	149.3	130.8	129.0
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)