

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: P510570

Luminaire Tested: **CST-CA10-630-760-U-T4-HSS**

Issue Date: 4/6/2021

**Test Information**

Test Method: LM-79-08  
Report Number: P510570  
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-CA10-630-760-U-T4-HSS  
Description: CELESTEON HIGH MAST LUMINAIRE  
Light Source: (10) 5700K CCT, 70 CRI LEDS  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 81385 lumens  
Efficiency: N/A  
Efficacy: 128.9 lumens/watt  
Luminous Opening: Circular (Dia: 2.08' x H: 0')  
IES Classification: Type IV - Short  
BUG Rating: B4 - U0 - G5

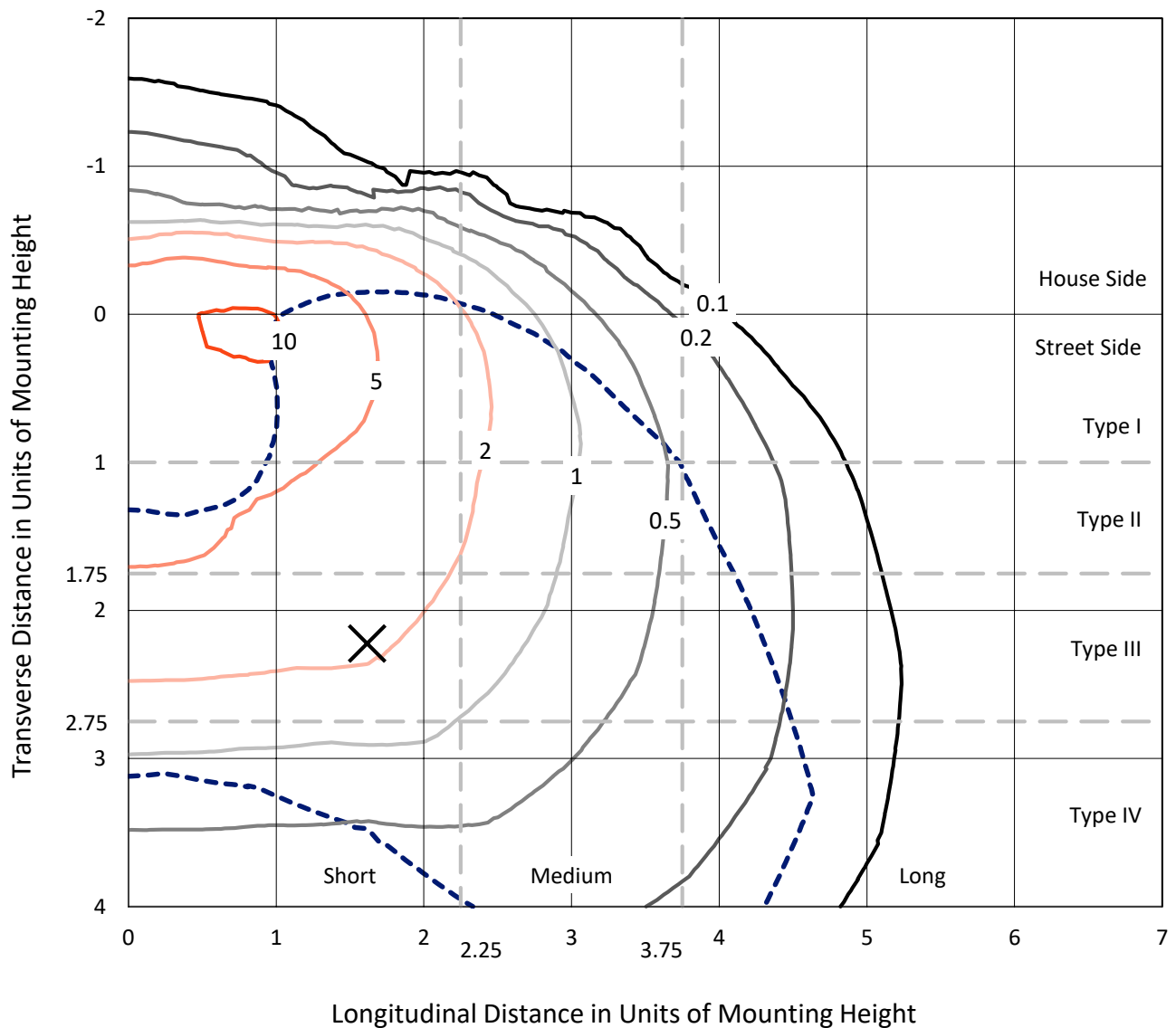
Input Watts (W): 631.4  
Input Voltage (V): 120  
Input Current (Ain): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 24 FT



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### Iso-Footcandle Lines of Horizontal Illumination

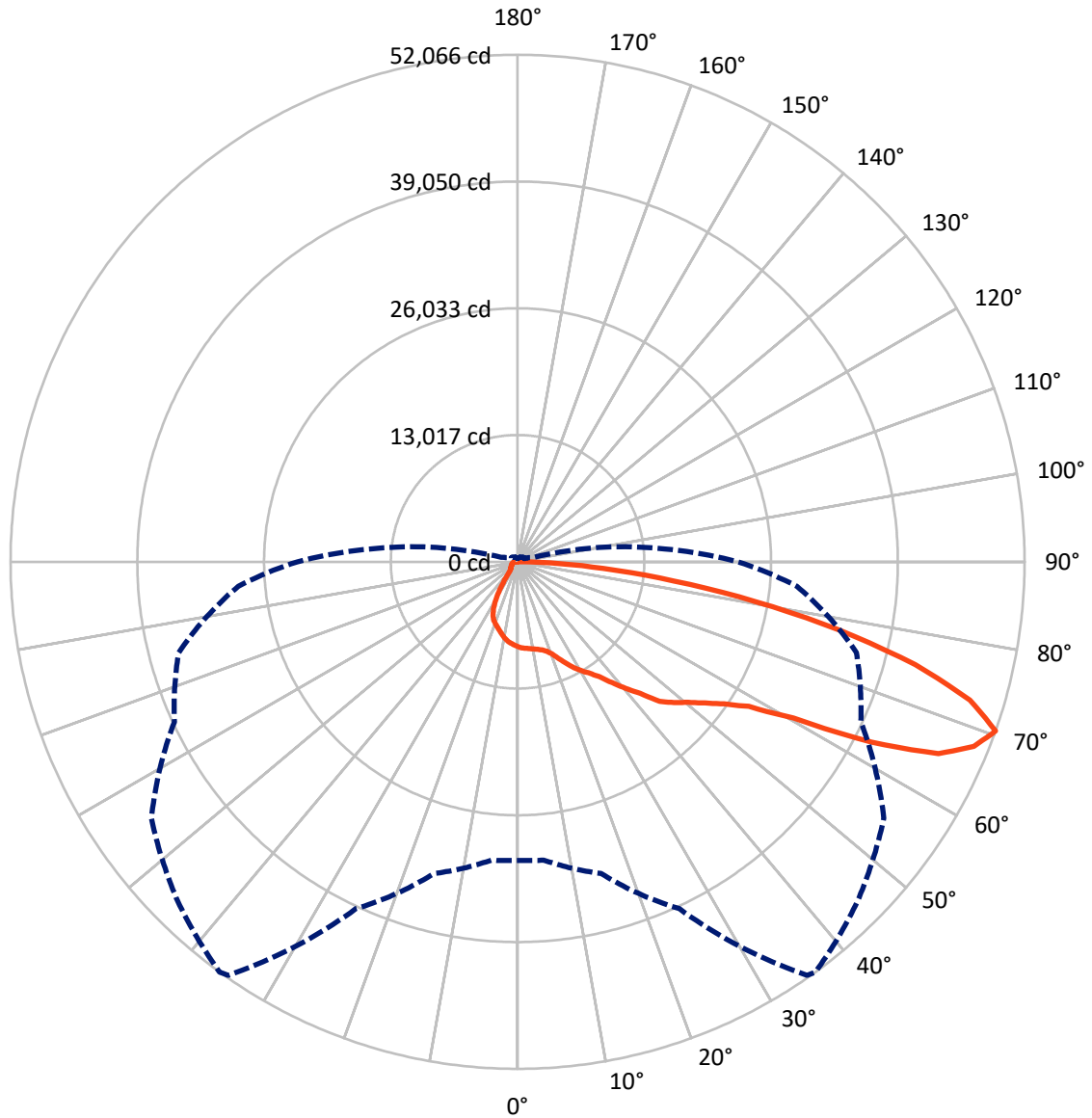
× Max cd  
 - - - 1/2 Max cd



Based on 30 foot mounting height. Maximum calculated value = 11 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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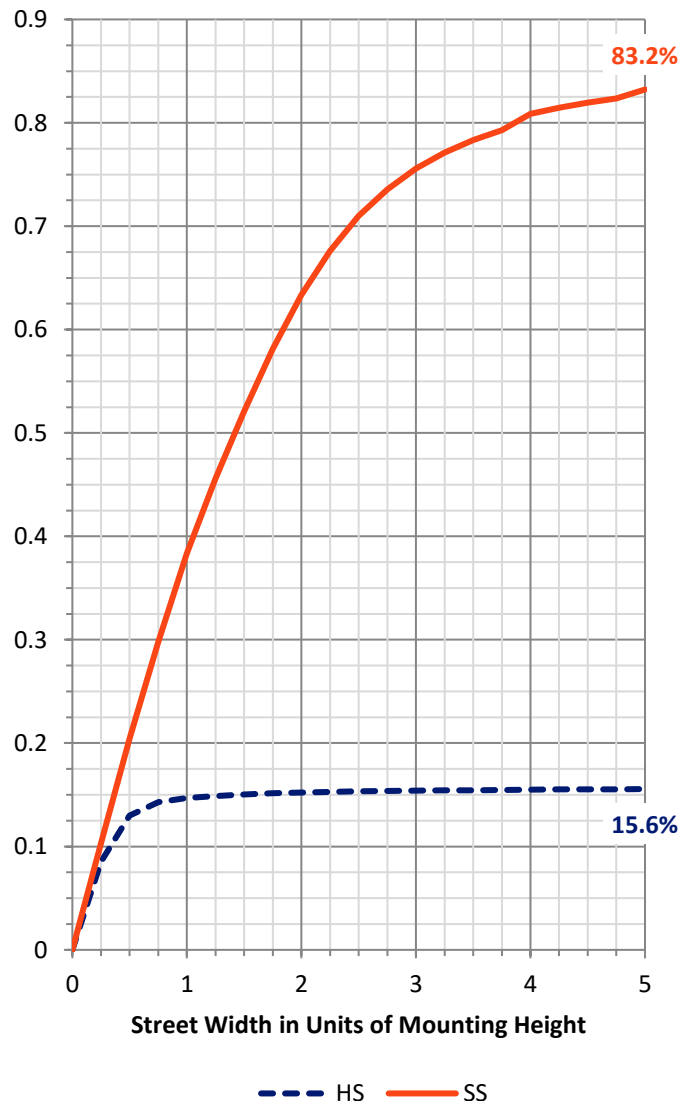
**FLUX DISTRIBUTION:**

		Downward	Upward	Total
<b>House Side</b>	Lumens	12843.2	0.0	12843.2
	% Fixture	15.8	0.0	15.8
<b>Street Side</b>	Lumens	68541.8	0.0	68541.8
	% Fixture	84.2	0.0	84.2
<b>Total</b>	Lumens	81385.0	0.0	81385.0
	% Fixture	100.0	0.0	100.0

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	827.0	1.0
10°-20°	2459.4	3.0
20°-30°	4422.7	5.4
30°-40°	6998.8	8.6
40°-50°	10937.8	13.4
50°-60°	15706.5	19.3
60°-70°	21304.5	26.2
70°-80°	15767.6	19.4
80°-90°	2960.7	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°	81385.0	100.0
0°-180°	81385.0	100.0

**Coefficient of Utilization**

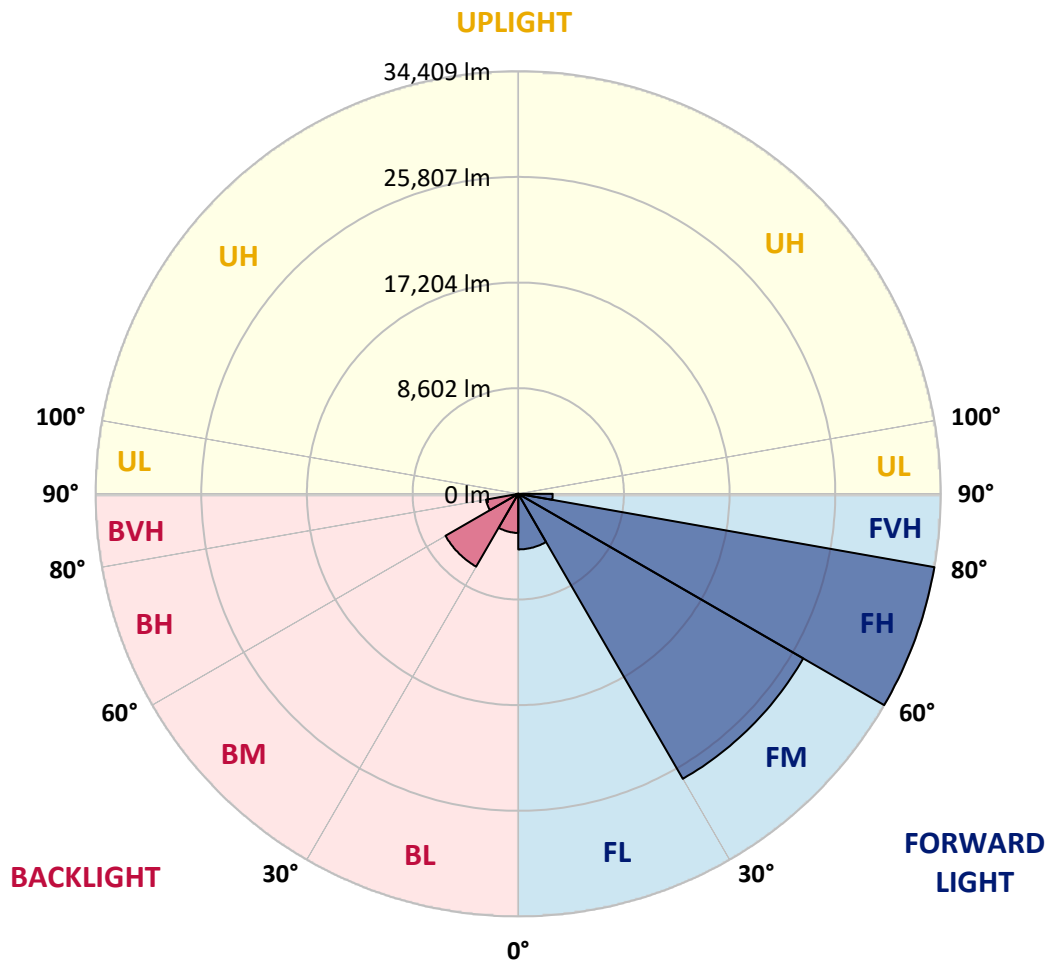


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**LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:**

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	4526.6	5.6			
FM (30°-60°)	26799.3	32.9			
FH (60°-80°)	34408.8	42.3			G5
FVH (80°-90°)	2807.1	3.4			G5
BL (0°-30°)	3182.5	3.9	B4/5000		
BM (30°-60°)	6843.8	8.4	B4/8500		
BH (60°-80°)	2663.3	3.3	B4/5000		G4/5000
BVH (80°-90°)	153.5	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°	8720.0	8720.0	8720.0	8720.0	8720.0	8720.0	8720.0	8720.0	8720.0	8720.0	8720.0
2.5°	8896.6	8877.8	8862.8	8868.4	8857.2	8864.7	8847.8	8827.1	8778.2	8757.6	8748.2
5°	8975.5	8969.9	8954.9	8943.6	8922.9	8915.4	8896.6	8913.5	8887.2	8819.6	8780.1
7.5°	9022.5	9020.6	9003.7	8979.3	8990.6	9000.0	9018.7	8992.4	8958.6	8926.7	8845.9
10°	9043.2	9043.2	9022.5	9035.7	9093.9	9099.5	9108.9	9125.8	9093.9	9046.9	8966.1
12.5°	9095.8	9092.0	9099.5	9142.8	9202.9	9216.0	9263.0	9263.0	9266.8	9238.6	9144.6
15°	9227.3	9227.3	9244.2	9283.7	9387.0	9394.5	9464.0	9526.0	9533.6	9492.2	9420.8
17.5°	9531.7	9524.2	9514.8	9539.2	9650.1	9653.8	9774.1	9853.0	9873.6	9918.7	9907.5
20°	10110.4	10102.9	10101.0	10102.9	10095.4	10084.1	10202.5	10287.0	10392.2	10471.1	10510.6
22.5°	10939.0	10922.1	10922.1	10830.0	10758.6	10769.9	10788.7	10835.6	10974.7	11113.7	11262.2
25°	11831.5	11820.2	11829.6	11594.7	11498.9	11536.5	11512.0	11585.3	11767.6	11887.8	12045.7
27.5°	12560.5	12577.4	12524.8	12342.5	12280.5	12308.7	12252.3	12462.8	12663.8	12874.3	13112.9
30°	13468.0	13377.8	13248.2	13026.4	13003.9	13007.7	13003.9	13342.1	13759.2	14059.8	14390.5
32.5°	14653.6	14668.6	14377.4	13855.0	13663.4	13637.1	13712.2	14208.3	14771.9	15439.0	15874.9
35°	15852.3	15876.7	15664.4	15119.5	14572.8	14490.1	14379.3	15023.7	15837.3	17175.1	17832.7
37.5°	17124.3	17210.8	16959.0	16472.4	15824.1	15747.1	15222.9	15856.1	17058.6	19230.6	20093.0
40°	18826.6	18734.6	18430.2	17812.0	17208.9	17084.9	16476.1	16808.7	18629.3	21804.7	22430.4
42.5°	20081.7	20055.4	19798.0	19187.4	18580.5	18480.9	17990.5	18351.3	20607.8	24414.5	24694.4
45°	21077.6	21239.1	21233.5	20850.2	20508.2	20451.9	20162.5	20694.3	22999.7	26877.7	26740.6
47.5°	21962.5	22062.1	21902.4	21735.2	21575.5	21594.3	21808.4	22902.0	25444.1	29029.1	28422.2
50°	23411.2	23283.4	22567.5	22439.8	22665.2	22674.6	23326.6	25010.1	28136.6	30889.2	29846.4
52.5°	25342.7	25203.6	23732.4	23514.5	24048.1	24087.6	25171.7	27110.7	30913.6	32666.6	31263.1
55°	28217.4	27894.2	26317.8	25340.8	25585.0	25744.8	27058.1	29130.5	33087.5	34233.6	32336.0
57.5°	31747.9	31982.7	31174.8	28967.1	27950.6	28010.7	29217.0	31063.9	35005.9	35605.2	32963.5
60°	35479.4	35423.0	35761.2	34831.1	32884.6	32561.4	31947.0	33036.8	36492.1	36760.8	33609.8
62.5°	37523.6	37852.4	38979.8	39165.8	40922.5	40751.6	36563.5	35483.1	38209.4	37486.0	33786.5
65°	37512.3	37655.1	39753.9	42061.2	47549.4	47500.6	45554.0	39021.1	39488.9	37873.1	33433.2
67.5°	35088.5	35310.3	37764.1	42271.6	50612.1	50553.8	49208.5	43994.6	39891.0	37407.1	31785.4
70°	30669.4	30744.5	33138.2	39308.6	51842.7	52066.3	49334.4	45903.5	38891.5	36022.4	28781.1
72.5°	25301.3	25145.4	27486.5	33568.5	48708.7	48575.3	47248.8	43624.4	37208.0	33333.7	23473.2
75°	18629.3	19063.4	21164.0	26952.9	41704.2	42192.7	42780.8	40137.2	33046.2	27471.5	16231.9
77.5°	12301.2	12853.6	14976.8	20209.5	33016.1	33775.2	35299.0	34137.8	26883.4	19706.0	7729.8
80°	6356.3	6773.5	8684.3	13409.7	23668.6	24764.0	27557.9	25855.6	19059.6	8909.8	1730.5
82.5°	2405.0	2350.5	3891.2	7675.3	15175.9	16171.7	18202.8	15504.7	6782.8	1565.1	804.2
85°	1055.9	1117.9	1612.1	3500.4	8676.8	8806.4	10311.4	6044.4	993.9	747.8	546.8
87.5°	456.6	524.2	676.4	1007.1	2927.3	3380.1	4182.4	1920.2	300.6	259.3	274.3
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°	8720.0	8720.0	8720.0	8720.0	8720.0	8720.0	8720.0	8720.0	8720.0	8720.0	8720.0
2.5°	8731.3	8720.0	8701.2	8654.2	8577.2	8567.8	8560.3	8552.8	8537.7	8545.3	8588.5
5°	8750.1	8729.4	8661.8	8594.1	8526.5	8466.3	8393.1	8364.9	8327.3	8302.9	8348.0
7.5°	8813.9	8770.7	8671.1	8579.1	8394.9	8306.6	8212.7	8101.8	8022.9	7972.2	8017.3
10°	8921.0	8866.6	8742.5	8552.8	8336.7	8094.3	7929.0	7744.8	7594.5	7553.2	7594.5
12.5°	9095.8	9015.0	8870.3	8612.9	8229.6	7912.1	7598.3	7355.9	7113.5	7044.0	7064.7
15°	9379.5	9315.6	9093.9	8738.8	8231.5	7746.7	7280.8	6889.9	6572.4	6461.6	6454.0
17.5°	9834.2	9766.5	9511.0	8988.7	8299.1	7617.1	6968.9	6373.2	5892.2	5648.0	5608.5
20°	10486.2	10392.2	10005.2	9356.9	8445.7	7560.7	6679.5	5879.1	5131.3	4672.8	4603.3
22.5°	11211.4	11111.8	10540.7	9640.7	8550.9	7449.9	6403.3	5332.3	4347.8	3787.9	3709.0
25°	12113.3	11895.3	11053.6	9909.3	8526.5	7216.9	5954.2	4590.2	3522.9	3038.2	2985.6
27.5°	13003.9	12727.7	11575.9	10050.3	8419.4	6846.7	5296.6	3722.1	2758.2	2414.4	2371.2
30°	14108.7	13575.1	12040.0	10116.0	8148.8	6292.5	4415.4	2829.6	2064.9	1828.2	1786.8
32.5°	15422.1	14614.1	12475.9	10042.7	7697.9	5446.9	3432.8	2072.4	1535.1	1386.6	1384.8
35°	17154.4	15888.0	12955.0	9802.2	7006.4	4535.7	2406.9	1416.7	1196.9	1146.1	1155.5
37.5°	19179.9	17612.9	13441.7	9407.7	6224.8	3470.3	1604.6	1091.6	1052.2	1054.1	1055.9
40°	21316.2	19518.1	14097.4	8853.4	5276.0	2512.1	1155.5	980.8	978.9	997.7	1003.3
42.5°	23356.7	21368.8	14905.4	8115.0	4282.0	1661.0	1001.5	935.7	911.3	918.8	924.4
45°	25252.5	22956.5	15593.0	7395.4	3216.7	1185.6	982.7	883.1	845.5	841.7	845.5
47.5°	26780.0	24228.5	16012.0	6549.9	2292.3	984.5	943.2	834.2	781.6	770.4	764.7
50°	27943.1	25173.6	16164.2	5591.6	1550.1	939.5	890.6	777.9	714.0	715.9	715.9
52.5°	29077.9	26032.2	15987.6	4625.9	1140.5	900.0	854.9	732.8	665.1	700.8	710.2
55°	29895.3	26393.0	15472.8	3581.2	950.7	851.1	815.4	680.2	633.2	691.4	710.2
57.5°	30372.5	26676.7	14527.7	2585.4	871.8	804.2	764.7	631.3	588.1	603.1	612.5
60°	30669.4	26280.2	13278.2	1768.0	830.5	766.6	714.0	599.4	541.1	505.4	499.8
62.5°	30505.9	25288.2	11632.3	1215.7	787.3	725.3	670.8	569.3	492.3	445.3	441.5
65°	29173.8	23452.5	8930.4	984.5	761.0	706.5	644.5	541.1	458.5	413.4	407.7
67.5°	26703.0	20153.1	5215.8	875.6	749.7	687.7	623.8	514.8	439.7	390.8	383.3
70°	22642.7	15159.0	1747.4	781.6	747.8	685.8	606.9	496.0	419.0	368.3	360.7
72.5°	16335.2	9146.5	851.1	687.7	699.0	657.6	593.7	481.0	405.8	342.0	328.8
75°	9283.7	2978.1	768.5	593.7	650.1	627.6	586.2	482.9	411.5	310.0	295.0
77.5°	2641.7	869.9	742.2	505.4	614.4	648.2	548.6	435.9	420.9	287.5	268.7
80°	892.5	774.1	715.9	392.7	496.0	535.5	475.4	383.3	424.6	261.2	242.4
82.5°	715.9	777.9	601.2	313.8	377.7	405.8	377.7	343.8	343.8	233.0	218.0
85°	573.1	721.5	381.4	249.9	281.8	311.9	266.8	257.4	240.5	195.4	189.8
87.5°	332.6	225.5	157.8	127.8	118.4	120.2	103.3	124.0	152.2	133.4	131.5
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)